

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: May 3, 2004, 10:16:20 ; Search time 41 Seconds
(without alignments)
3.657 Million cell updates/sec

Title: us-10-017-621-3

Perfect score: 1745

Sequence: 1 tggagcagcgttaagatg.....gttcacgtccacactgtcc 1745

Scoring table:

IDENTITY_NUC

Gapop 10.0 , Gapext 0.5

Searched: 2172 seqs, 42957 residues

Total number of hits satisfying chosen parameters: 4344

Minimum DB seq length: 8

Maximum DB seq length: 50

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 2195 summaries

Database : rng.seq.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	ID	Description
1	22.4	1.3	33	1 ABA04099	Human Cdk5 related
2	22.4	1.3	33	1 ABA04100	Human Cdk5 related
3	22.4	1.3	22	1 AAL61693	Human PCTAIRE prot
4	22	1.3	31	1 AAI30264	Human single nucle
5	21.4	1.2	31	1 AAI29606	Human single nucle
6	21	1.2	21	1 AAH62195	PCTAIRE-1 polymorp
7	20	1.1	20	1 AAL61700	Human PCTAIRE prot
8	20	1.1	20	1 AAL61714	Human PCTAIRE prot
9	20	1.1	20	1 AAL61720	Human PCTAIRE prot
10	20	1.1	20	1 AAL61749	Human PCTAIRE prot
11	20	1.1	20	1 AAL61759	Human PCTAIRE prot
12	20	1.1	20	1 AAL61767	Human PCTAIRE prot
13	20	1.1	20	1 AAL61772	Human PCTAIRE prot
14	20	1.1	20	1 AAL61773	Human PCTAIRE prot
15	20	1.1	20	1 AAL61706	Human PCTAIRE prot
16	20	1.1	20	1 AAL61727	Human PCTAIRE prot
17	20	1.1	20	1 AAL61737	Human PCTAIRE prot
18	20	1.1	20	1 AAL61750	Human PCTAIRE prot
19	20	1.1	20	1 AAL61754	Human PCTAIRE prot
20	20	1.1	20	1 AAL61756	Human PCTAIRE prot
21	20	1.1	20	1 AAL61765	Human PCTAIRE prot
22	20	1.1	20	1 AAL61768	Human PCTAIRE prot
23	20	1.1	20	1 AAL61718	Human PCTAIRE prot
24	20	1.1	20	1 AAL61728	Human PCTAIRE prot
25	20	1.1	20	1 AAL61753	Human PCTAIRE prot
26	20	1.1	20	1 AAL61758	Human PCTAIRE prot
27	20	1.1	20	1 AAL61770	Human PCTAIRE prot
28	20	1.1	20	1 AAL61715	Human PCTAIRE prot
29	20	1.1	20	1 AAL61732	Human PCTAIRE prot
30	20	1.1	20	1 AAL61745	Human PCTAIRE prot
31	20	1.1	20	1 AAL61757	Human PCTAIRE prot
32	20	1.1	20	1 AAL61764	Human PCTAIRE prot
33	20	1.1	20	1 AAL61726	Human PCTAIRE prot

c 34	20	1.1	20	1 AAL61740	Human PCTAIRE prot
c 35	20	1.1	20	1 AAL61741	Human PCTAIRE prot
c 36	20	1.1	20	1 AAL61760	Human PCTAIRE prot
c 37	20	1.1	20	1 AAL61771	Human PCTAIRE prot
c 38	20	1.1	20	1 AAL61704	Human PCTAIRE prot
c 39	20	1.1	20	1 AAL61707	Human PCTAIRE prot
c 40	20	1.1	20	1 AAL61724	Human PCTAIRE prot
c 41	20	1.1	20	1 AAL61729	Human PCTAIRE prot
c 42	20	1.1	20	1 AAL61755	Human PCTAIRE prot
c 43	20	1.1	20	1 AAL61748	Human PCTAIRE prot
c 44	20	1.1	20	1 AAL61701	Human PCTAIRE prot
c 45	20	1.1	20	1 AAL61723	Human PCTAIRE prot
c 46	20	1.1	20	1 AAL61733	Human PCTAIRE prot
c 47	20	1.1	20	1 AAL61734	Human PCTAIRE prot
c 48	20	1.1	20	1 AAL61739	Human PCTAIRE prot
c 49	20	1.1	20	1 AAL61766	Human PCTAIRE prot
c 50	20	1.1	20	1 AAL61702	Human PCTAIRE prot
c 51	20	1.1	20	1 AAL61705	Human PCTAIRE prot
c 52	20	1.1	20	1 AAL61712	Human PCTAIRE prot
c 53	20	1.1	20	1 AAL61736	Human PCTAIRE prot
c 54	20	1.1	20	1 AAL61747	Human PCTAIRE prot
c 55	20	1.1	20	1 AAL61761	Human PCTAIRE prot
c 56	20	1.1	20	1 AAL61710	Human PCTAIRE prot
c 57	20	1.1	20	1 AAL61742	Human PCTAIRE prot
c 58	20	1.1	20	1 AAL61698	Human PCTAIRE prot
c 59	20	1.1	20	1 AAL61699	Human PCTAIRE prot
c 60	20	1.1	20	1 AAL61709	Human PCTAIRE prot
c 61	20	1.1	20	1 AAL61721	Human PCTAIRE prot
c 62	20	1.1	20	1 AAL61735	Human PCTAIRE prot
c 63	20	1.1	20	1 AAL61746	Human PCTAIRE prot
c 64	20	1.1	20	1 AAL61763	Human PCTAIRE prot
c 65	20	1.1	20	1 AAL61730	Human PCTAIRE prot
c 66	20	1.1	20	1 AAL61731	Human PCTAIRE prot
c 67	20	1.1	20	1 AAL61751	Human PCTAIRE prot
c 68	20	1.1	20	1 AAL61752	Human PCTAIRE prot
c 69	20	1.1	20	1 AAL61775	Human PCTAIRE prot
c 70	20	1.1	20	1 AAL61708	Human PCTAIRE prot
c 71	20	1.1	20	1 AAL61717	Human PCTAIRE prot
c 72	20	1.1	20	1 AAL61722	Human PCTAIRE prot
c 73	20	1.1	20	1 AAL61725	Human PCTAIRE prot
c 74	20	1.1	20	1 AAL61744	Human PCTAIRE prot
c 75	20	1.1	20	1 AAL61762	Human PCTAIRE prot
c 76	20	1.1	20	1 AAL61703	Human PCTAIRE prot
c 77	20	1.1	20	1 AAL61711	Human PCTAIRE prot
c 78	20	1.1	20	1 AAL61716	Human PCTAIRE prot
c 79	20	1.1	20	1 AAL61719	Human PCTAIRE prot
c 80	20	1.1	20	1 AAL61769	Human PCTAIRE prot
c 81	20	1.1	20	1 AAL61774	Human PCTAIRE prot
c 82	20	1.1	20	1 AAL61713	Human PCTAIRE prot
c 83	20	1.1	20	1 AAL61738	Human PCTAIRE prot
c 84	20	1.1	20	1 AAL61743	Human PCTAIRE prot
c 85	19.2	1.1	25	1 ACI51216	Human microarray D
c 86	19.2	1.1	25	1 ACI51217	Human microarray D
c 87	19.2	1.1	29	1 AAZ29517	Primer-2 for ident
c 88	19	1.1	19	1 AAH82879	cdk4 ribozyme bind
c 89	19	1.1	19	1 AAH82878	cdk4 ribozyme bind
c 90	19	1.1	19	1 AAH58041	Cell-cycle depende
c 91	19	1.1	19	1 AAH58040	Cell-cycle depende
c 92	19	1.1	19	1 AAL61694	Human PCTAIRE prot
c 93	18.8	1.1	25	1 ACI39577	Human microarray D
c 94	18.8	1.1	28	1 ACI04565	Human ALDH3 gene p
c 95	18.6	1.1	25	1 ABN15303	Human GMPL-1 25-m
c 96	18.6	1.1	25	1 ABV82335	Human HTPL scanin
c 97	18.6	1.1	25	1 ABV82336	Human HTPL scanin
c 98	18.6	1.1	25	1 ACK02038	Human microarray D
c 99	18.6	1.1	27	1 ABA99028	Human mammary gland
c 100	18.2	1.0	27	1 AET03768	Human SHH gene PCR
c 101	17.8	1.0	24	1 AA201840	Nuclease resistant
c 102	17.6	1.0	25	1 AA205313	Kinase domain 5' P
c 103	17.6	1.0	25	1 ABN15302	Human GMPL-1 25-m
c 104	17.6	1.0	25	1 ABN15304	Human GMPL-1 25-m
c 105	17.6	1.0	25	1 ABV82337	Human HTPL scanin
c 106	17.6	1.0	25	1 ABV82334	Human HTPL scanin

C 107	17.6	1.0	25	1	ACK27269	Human microarray D	180	16.2	0.9	24	1	ABA82542	Znax1 gene region
C 108	17.6	1.0	25	1	ACI83994	Human microarray D	C 181	16.2	0.9	24	1	ABS55758	Human p70 ribosome
C 109	17.6	1.0	26	1	ABK66672	Human gene specific	182	16.2	0.9	24	1	ABK23339	Human Znax1 cDNA f
C 110	17.6	1.0	26	1	ABX17595	RTQ-PCR probe #2 f	183	16.2	0.9	24	1	ACC45922	Human HBM STR mark
C 111	17.4	1.0	19	1	AA82761	cdk3 ribozyme bind	184	16.2	0.9	24	1	ADB98620	Sequence tagged si
C 112	17.4	1.0	19	1	AA82757	cdk3 ribozyme bind	C 185	16	0.9	20	1	AAT57065	Soluble type I ins
C 113	17.4	1.0	19	1	AAH57919	Cell-cycle depende	C 186	16	0.9	20	1	AAK31942	Primer C used in t
C 114	17.4	1.0	19	1	AAH57923	Human microarray D	187	16	0.9	24	1	ABL1245	Human neuregulin 5
C 115	17.2	1.0	20	1	ACI39576	Chemically modifie	C 188	16	0.9	24	1	AB183145	Capture oligonucle
C 116	17.2	1.0	20	1	AAK29342	JNK2-specific prob	C 189	16	0.9	24	1	AB183144	Capture oligonucle
C 117	17.0	1.0	20	1	AAK29331	Antisense oligonc	C 190	16	0.9	24	1	AB192411	Capture oligonucle
C 118	17.0	1.0	20	1	AAK48551	JNK antisense olig	191	16	0.9	24	1	AAA83175	cdk7 ribozyme bind
C 119	17.0	1.0	20	1	AAK62885	JNK1 antisense oli	192	15.8	0.9	19	1	AAA83176	Cyclin D2 ribozyme
C 120	17.0	1.0	20	1	AAK62874	JNK1 antisense oli	193	15.8	0.9	19	1	AAA84307	Cyclin D2 ribozyme
C 121	17.0	1.0	20	1	AAH23754	Immunostimulatory	194	15.8	0.9	19	1	AAH59469	Cell-cycle depende
C 122	17.0	1.0	20	1	AAH59183	Immunostimulatory	195	15.8	0.9	19	1	AAH58336	Cell-cycle depende
C 123	17.0	1.0	20	1	AB577827	Angiogenesis inh	196	15.8	0.9	19	1	AAH58337	Cell-cycle depende
C 124	17.0	1.0	20	1	AB139057	Immunostimulatory	197	15.8	0.9	19	1	AAH58338	Dog genomic marker
C 125	17.0	1.0	20	1	ADA26589	Human JNK2 sense	198	15.8	0.9	19	1	AAH58339	Dog genomic marker
C 126	17.0	1.0	20	1	ADA26578	Human Jun N-termin	199	15.8	0.9	19	1	AAA66612	Dog genomic marker
C 127	17.0	1.0	20	1	ACD99615	Immunostimulatory	200	15.8	0.9	20	1	AAA66612	Human daxx inhibit
C 128	17.0	1.0	20	1	ACD99615	Immunostimulatory	201	15.8	0.9	20	1	AAH72934	CDC2 gene antisens
C 129	17.0	1.0	25	1	ADA236748	PCR primer used to	202	15.8	0.9	20	1	AAH72934	Human oligonucleot
C 130	17.0	1.0	25	1	AD303815	Human MD27 scannin	C 203	15.8	0.9	20	1	ABQ74636	Human PDE4A olig
C 131	17.0	1.0	25	1	AD303816	Human MD27 scannin	C 204	15.8	0.9	20	1	ABZ90928	Human oligonucleot
C 132	17.0	1.0	25	1	AD303814	Human microarray D	C 205	15.8	0.9	20	1	ABZ98911	Human oligonucleot
C 133	17.0	1.0	25	1	AC148161	Human microarray D	C 206	15.8	0.9	20	1	ABZ86780	Human gene single
C 134	17.0	1.0	25	1	ACK02039	Human microarray D	C 207	15.8	0.9	21	1	AAF97316	NPE21L polymorphis
C 135	17.0	1.0	25	1	ACK28727	Human microarray D	C 208	15.8	0.9	21	1	AAH62396	Human NOXV DNA PCR
C 136	17.0	1.0	26	1	ABA99030	Human mammary glan	C 209	15.8	0.9	23	1	AAH72455	Human NOXV protein
C 137	17.0	1.0	26	1	ABS64424	Human NOXV probe A	C 210	15.8	0.9	23	1	AAH47509	Vascular endotheli
C 138	16.8	1.0	20	1	AAH62308	Human haematopoiet	C 211	15.8	0.9	24	1	ABV74691	Human G-protein co
C 139	16.8	1.0	20	1	AAH94989	Primer 3 for sequ	C 212	15.8	0.9	24	1	ABV74691	Human G-protein co
C 140	16.8	1.0	21	1	AAH94989	Primer for sequ	C 213	15.6	0.9	22	1	AAZ56474	Probe for Streptoc
C 141	16.8	1.0	21	1	AAH90553	HLA class I gene s	C 214	15.6	0.9	22	1	ABS59078	Probe for Streptoc
C 142	16.8	1.0	21	1	AAH90553	HLA class I gene s	C 215	15.6	0.9	23	1	AAQ37360	Human IVS17 3' acc
C 143	16.6	1.0	23	1	AAQ62402	Vector pVAC1 const	C 216	15.6	0.9	23	1	AAQ37360	SNP specific upper
C 144	16.6	1.0	23	1	AAH233985	Human hgt1 PCR pri	C 217	15.6	0.9	23	1	AAQ03115	Mucor circineoloid
C 145	16.6	1.0	23	1	AAH98718	L. mexicana kinase	C 218	15.6	0.9	24	1	AAH40717	Fruit fly LRR47 po
C 146	16.6	1.0	23	1	ACF05113	Retroviral vector	C 219	15.6	0.9	24	1	ABS54362	Oligonucleotide ad
C 147	16.6	1.0	24	1	AAH07024	KSR PCR primer SE	C 220	15.6	0.9	24	1	ABK90912	Oligonucleotide ad
C 148	16.6	1.0	24	1	AAH64165	Primer #105. Homo	C 221	15.6	0.9	24	1	ABQ10087	Oligonucleotide ad
C 149	16.6	1.0	24	1	AAH64165	Primer #105. Homo	C 222	15.6	0.9	24	1	ABQ10087	Oligonucleotide ad
C 150	16.6	1.0	24	1	AAH60939	Human NOXV polyep	C 223	15.6	0.9	24	1	ABQ10128	Capture oligonucle
C 151	16.6	1.0	25	1	AAH39887	SNP specific SNPE	C 224	15.6	0.9	24	1	ABQ10128	Capture oligonucle
C 152	16.6	1.0	25	1	ABN15301	Human GDMPL-1 25-m	C 225	15.6	0.9	24	1	ABQ10128	Capture oligonucle
C 153	16.6	1.0	25	1	ABN15305	Human HTPL scannin	C 226	15.6	0.9	24	1	ABQ10128	Capture oligonucle
C 154	16.6	1.0	25	1	ABV82338	Human HTPL scannin	C 227	15.6	0.9	24	1	ABQ10128	Capture oligonucle
C 155	16.6	1.0	25	1	ABV82338	Human HTPL scannin	C 228	15.6	0.9	24	1	ABQ10128	Capture oligonucle
C 156	16.6	1.0	25	1	ABV82338	Human HTPL scannin	C 229	15.6	0.9	24	1	ABQ10128	Capture oligonucle
C 157	16.6	1.0	25	1	ABV82338	Human HTPL scannin	C 230	15.4	0.9	17	1	ABK57128	Human ERG Amberzym
C 158	16.6	1.0	25	1	ABV82338	Human HTPL scannin	C 231	15.4	0.9	17	1	ABK57128	Human ERG Amberzym
C 159	16.6	1.0	25	1	ABV82338	Human HTPL scannin	C 232	15.4	0.9	17	1	ABK57128	Human ERG Amberzym
C 160	16.6	1.0	25	1	ABV82338	Human HTPL scannin	C 233	15.4	0.9	17	1	ABK57128	Human ERG Amberzym
C 161	16.6	1.0	25	1	ABV82338	Human HTPL scannin	C 234	15.4	0.9	17	1	ABK57128	Human ERG Amberzym
C 162	16.6	1.0	25	1	ABV82338	Human HTPL scannin	C 235	15.4	0.9	17	1	ABK57128	Human ERG Amberzym
C 163	16.6	1.0	25	1	ABV82338	Human HTPL scannin	C 236	15.4	0.9	17	1	ABK57128	Human ERG Amberzym
C 164	16.4	0.9	19	1	AAH57924	Human microarray D	C 237	15.4	0.9	19	1	AAH57884	Human ERG Amberzym
C 165	16.4	0.9	19	1	AAH57924	Human microarray D	C 238	15.4	0.9	19	1	AAH57884	Human ERG Amberzym
C 166	16.4	0.9	19	1	AAH57924	Human microarray D	C 239	15.4	0.9	19	1	AAH57884	Human ERG Amberzym
C 167	16.4	0.9	20	1	AAZ18127	Human microarray D	C 240	15.4	0.9	20	1	AAH57884	Human ERG Amberzym
C 168	16.4	0.9	20	1	AAZ18127	Human microarray D	C 241	15.4	0.9	20	1	AAH57884	Human ERG Amberzym
C 169	16.4	0.9	20	1	AAZ18127	Human microarray D	C 242	15.4	0.9	20	1	AAH57884	Human ERG Amberzym
C 170	16.4	0.9	20	1	AAZ18127	Human microarray D	C 243	15.4	0.9	20	1	AAH57884	Human ERG Amberzym
C 171	16.4	0.9	20	1	AAZ18127	Human microarray D	C 244	15.4	0.9	20	1	AAH57884	Human ERG Amberzym
C 172	16.2	0.9	21	1	AAH57924	Human microarray D	C 245	15.4	0.9	21	1	AAH57884	Human ERG Amberzym
C 173	16.2	0.9	21	1	AAH57924	Human microarray D	C 246	15.4	0.9	21	1	AAH57884	Human ERG Amberzym
C 174	16.2	0.9	21	1	AAH57924	Human microarray D	C 247	15.4	0.9	21	1	AAH57884	Human ERG Amberzym
C 175	16.2	0.9	21	1	AAH57924	Human microarray D	C 248	15.4	0.9	21	1	AAH57884	Human ERG Amberzym
C 176	16.2	0.9	21	1	AAH57924	Human microarray D	C 249	15.4	0.9	21	1	AAH57884	Human ERG Amberzym
C 177	16.2	0.9	22	1	AAH57924	Human microarray D	C 250	15.4	0.9	22	1	AAH57884	Human ERG Amberzym
C 178	16.2	0.9	22	1	AAH57924	Human microarray D	C 251	15.2	0.9	20	1	AAH57884	Human ERG Amberzym
C 179	16.2	0.9	23	1	AAH57924	Human microarray D	C 252	15.2	0.9	20	1	AAH57884	Human ERG Amberzym

C 253	15.2	0.9	20	1	AA17949	Anti-CMV oligonucleotide	C 326	15.2	0.9	21	1	AA248171	CMV replication ch
C 254	15.2	0.9	20	1	AA17894	Anti-CMV oligonucleotide	C 327	15.2	0.9	21	1	AA24473	Synthetic oligonucleotide
C 255	15.2	0.9	20	1	AA18135	STR 7 gene specific	C 328	15.2	0.9	21	1	AA257151	Phosphorothioate 2
C 256	15.2	0.9	20	1	AA18149	STR 14 gene specific	C 329	15.2	0.9	21	1	AA294541	Example biological
C 257	15.2	0.9	20	1	AA18163	STR 21 gene specific	C 330	15.2	0.9	21	1	AA294544	Example biological
C 258	15.2	0.9	20	1	AA186355	PCR primer used to	C 331	15.2	0.9	21	1	AA260903	Anti-CMV oligonucleotide
C 259	15.2	0.9	20	1	AA186355	CDK4 specific anti	C 332	15.2	0.9	21	1	AA260903	Human gene single
C 260	15.2	0.9	20	1	AA227716	PCR primer hGH S2.	C 333	15.2	0.9	21	1	AA260903	Human gene single
C 261	15.2	0.9	20	1	AA244825	Human FADD primer	C 334	15.2	0.9	21	1	AA260903	Oligonucleotide #3
C 262	15.2	0.9	20	1	AA244825	Gene typing PCR pr	C 335	15.2	0.9	21	1	AA260903	Modified phosphorothioate
C 263	15.2	0.9	20	1	AA268207	Human p38beta anti	C 336	15.2	0.9	21	1	AA268207	CMV targeted antis
C 264	15.2	0.9	20	1	AA279506	Beagle dog ob gene	C 337	15.2	0.9	21	1	AA279506	CMV targeted antis
C 265	15.2	0.9	20	1	AA280677	Primer MUC5B rever	C 338	15.2	0.9	21	1	AA280677	Hepatitis C virus
C 266	15.2	0.9	20	1	AA291033	Human-specific glo	C 339	15.2	0.9	21	1	AA291033	Hepatitis C virus
C 267	15.2	0.9	20	1	AA297532	Human MEK1 phosph	C 340	15.2	0.9	21	1	AA297532	Antisense oligonucleotide
C 268	15.2	0.9	20	1	AA297532	Human Her-1 anticse	C 341	15.2	0.9	21	1	AA297532	Methylated antisense
C 269	15.2	0.9	20	1	AA297532	Chimeric beta-gluc	C 342	15.2	0.9	21	1	AA297532	Cytomegalovirus (C
C 270	15.2	0.9	20	1	AA297532	Human calreticulin	C 343	15.2	0.9	21	1	AA297532	Novel G protein-co
C 271	15.2	0.9	20	1	AA297532	FAM modified probe	C 344	15.2	0.9	21	1	AA297532	Novel G protein-co
C 272	15.2	0.9	20	1	AA297532	Mouse genomic DNA	C 345	15.2	0.9	21	1	AA297532	Oligomeric compound
C 273	15.2	0.9	20	1	AA297532	Human RecQ protein	C 346	15.2	0.9	21	1	AA297532	Oligomeric compound
C 274	15.2	0.9	20	1	AA297532	Acyl CoA cholesterol	C 347	15.2	0.9	21	1	AA297532	Human Von Willebra
C 275	15.2	0.9	20	1	AA297532	Human p38-beta MAP	C 348	15.2	0.9	21	1	AA297532	Human light chain
C 276	15.2	0.9	20	1	AA297532	Mouse src-c chimera	C 349	15.2	0.9	21	1	AA297532	Synthetic phosphor
C 277	15.2	0.9	20	1	AA297532	Human TTH2 intron	C 350	15.2	0.9	21	1	AA297532	HCNV mRNA targetin
C 278	15.2	0.9	20	1	AA297532	Real time PCR targ	C 351	15.2	0.9	21	1	AA297532	HCNV inhibitory an
C 279	15.2	0.9	20	1	AA297532	Matrix metalloprot	C 352	15.2	0.9	21	1	AA297532	Human TGR23-2 PCR
C 280	15.2	0.9	20	1	AA297532	Leptin gene-specif	C 353	15.2	0.9	21	1	AA297532	Human GPCR TGR23-2
C 281	15.2	0.9	20	1	AA297532	PCR primer #2 used	C 354	15.2	0.9	21	1	AA297532	HCNV inhibitory an
C 282	15.2	0.9	21	1	AA297532	DNA for modulating	C 355	15.2	0.9	21	1	AA297532	Human glycoprotein
C 283	15.2	0.9	21	1	AA297532	DNA for modulating	C 356	15.2	0.9	21	1	AA297532	Human 15-2 antisense
C 284	15.2	0.9	21	1	AA297532	Antisense oligonucleotide	C 357	15.2	0.9	21	1	AA297532	Human TGR23-2 liga
C 285	15.2	0.9	21	1	AA297532	CMV IE2 target gen	C 358	15.2	0.9	21	1	AA297532	Human TGR23-2 liga
C 286	15.2	0.9	21	1	AA297532	Peptide nucleic ac	C 359	15.2	0.9	21	1	AA297532	Human GPCR TGR23-2
C 287	15.2	0.9	21	1	AA297532	Peptide nucleic ac	C 360	15.2	0.9	21	1	AA297532	HCNV inhibitory an
C 288	15.2	0.9	21	1	AA297532	Antisense oligonucleotide	C 361	15.2	0.9	21	1	AA297532	Human glycoprotein
C 289	15.2	0.9	21	1	AA297532	IE2 translational	C 362	15.2	0.9	21	1	AA297532	Human 15-2 antisense
C 290	15.2	0.9	21	1	AA297532	Chimeric 2'-O-meth	C 363	15.2	0.9	21	1	AA297532	Human 15-2 antisense
C 291	15.2	0.9	21	1	AA297532	Chimeric 2'-O-meth	C 364	15.2	0.9	21	1	AA297532	Human TGR23-2 liga
C 292	15.2	0.9	21	1	AA297532	Phosphorothioate o	C 365	15.2	0.9	21	1	AA297532	Human TGR23-2 liga
C 293	15.2	0.9	21	1	AA297532	Anti-cytomegalovir	C 366	15.2	0.9	21	1	AA297532	Antisense oligonucleotide
C 294	15.2	0.9	21	1	AA297532	ISIS-2922, cytochrome	C 367	15.2	0.9	21	1	AA297532	Human NOV2 RTQ PCR
C 295	15.2	0.9	21	1	AA297532	CMV gene oligonucleotide	C 368	15.2	0.9	21	1	AA297532	Human G-protein co
C 296	15.2	0.9	21	1	AA297532	Human galactokinase	C 369	15.2	0.9	21	1	AA297532	Human NOV31 revers
C 297	15.2	0.9	21	1	AA297532	Antisense oligonucleotide	C 370	15.2	0.9	21	1	AA297532	PCR primer contain
C 298	15.2	0.9	21	1	AA297532	Primer #2 for huma	C 371	15.2	0.9	21	1	AA297532	Candida CDX1 gene
C 299	15.2	0.9	21	1	AA297532	Human TSC gene exo	C 372	15.2	0.9	21	1	AA297532	Primer 9826 for ha
C 300	15.2	0.9	21	1	AA297532	CMV target sequenc	C 373	15.2	0.9	21	1	AA297532	Cloning vector mul
C 301	15.2	0.9	21	1	AA297532	CMV antisense chim	C 374	15.2	0.9	21	1	AA297532	Degenerate PCR pri
C 302	15.2	0.9	21	1	AA297532	CMV antisense chim	C 375	15.2	0.9	21	1	AA297532	Chicory germacrone
C 303	15.2	0.9	21	1	AA297532	Fully modified pho	C 376	15.2	0.9	21	1	AA297532	Human G-epsilonRI
C 304	15.2	0.9	21	1	AA297532	Phosphorothioate 2	C 377	15.2	0.9	21	1	AA297532	Human F-epsilonRI
C 305	15.2	0.9	21	1	AA297532	Chimeric 2'-O-meth	C 378	15.2	0.9	21	1	AA297532	Human F-epsilonRI
C 306	15.2	0.9	21	1	AA297532	Chimeric 2'-O-meth	C 379	15.2	0.9	21	1	AA297532	Human chromosome 1
C 307	15.2	0.9	21	1	AA297532	Phosphorothioate o	C 380	15.2	0.9	21	1	AA297532	Toxicologically re
C 308	15.2	0.9	21	1	AA297532	Target cytomagalov	C 381	15.2	0.9	21	1	AA297532	Antisense PCR prim
C 309	15.2	0.9	21	1	AA297532	2'-MOE capped vers	C 382	15.2	0.9	21	1	AA297532	IGF-I oligonucleot
C 310	15.2	0.9	21	1	AA297532	Oligonucleotide us	C 383	15.2	0.9	21	1	AA297532	IGF-I oligonucleot
C 311	15.2	0.9	21	1	AA297532	Oligonucleotide us	C 384	15.2	0.9	21	1	AA297532	IGF-I oligonucleot
C 312	15.2	0.9	21	1	AA297532	Deletion sequence	C 385	15.2	0.9	21	1	AA297532	Human PTAIRE prot
C 313	15.2	0.9	21	1	AA297532	Deletion sequence	C 386	15.2	0.9	21	1	AA297532	Human G-alpha-12 a
C 314	15.2	0.9	21	1	AA297532	HIV 5' UTR homolog	C 387	15.2	0.9	21	1	AA297532	cdk2 ribozyme bind
C 315	15.2	0.9	21	1	AA297532	Phosphorothioate o	C 388	15.2	0.9	21	1	AA297532	Cell-cycle depende
C 316	15.2	0.9	21	1	AA297532	Phosphorothioate o	C 389	15.2	0.9	21	1	AA297532	Probe to mutant se
C 317	15.2	0.9	21	1	AA297532	Mismatch reporter	C 390	15.2	0.9	21	1	AA297532	Interleukin IL-8 h
C 318	15.2	0.9	21	1	AA297532	HCNV antisense inh	C 391	15.2	0.9	21	1	AA297532	Transforming growt
C 319	15.2	0.9	21	1	AA297532	Mouse type II hair	C 392	15.2	0.9	21	1	AA297532	ADA66486
C 320	15.2	0.9	21	1	AA297532	Antisense inhibito	C 393	15.2	0.9	21	1	AA297532	Probe to detect in
C 321	15.2	0.9	21	1	AA297532	HCNV phosphorothio	C 394	15.2	0.9	21	1	AA297532	ADA66486
C 322	15.2	0.9	21	1	AA297532	HCNV targeting ant	C 395	15.2	0.9	21	1	AA297532	AAQ37151
C 323	15.2	0.9	21	1	AA297532	HCNV targeting pho	C 396	15.2	0.9	21	1	AA297532	AAQ37151
C 324	15.2	0.9	21	1	AA297532	HCNV targeting pho	C 397	15.2	0.9	21	1	AA297532	AAQ37151
C 325	15.2	0.9	21	1	AA297532	CMV replication ch	C 398	15.2	0.9	21	1	AA297532	AAQ37151

C 399	15	0.9	23	1	AAZ60724	PCR primer used to	C 472	14.6	0.8	21	1	AAAC80113	Reverse primer #25
C 400	15	0.9	23	1	AAZ29067	Sense PCR primer f	C 473	14.6	0.8	21	1	AAAC80113	Mouse Lkb1 PCR pri
C 401	15	0.9	23	1	AAAL1393	PCR primer 944-966	C 474	14.6	0.8	21	1	AAAF96555	Human gene single
C 402	15	0.9	23	1	AAAC04372	Human TANGO 298 Ta	C 475	14.6	0.8	21	1	AAAF96555	Human gene single
C 403	15	0.9	23	1	AAAF30591	Human factor V gen	C 476	14.6	0.8	21	1	AAAF96555	Human gene single
C 404	15	0.9	23	1	ABT06518	Retinoic acid rece	C 477	14.6	0.8	21	1	AAAF97060	Human gene single
C 405	15	0.9	23	1	ABT06518	Nucleic acid rece	C 478	14.6	0.8	21	1	AAAF28957	Equine GW-CSF gene
C 406	15	0.9	23	1	ACF05660	Beta-actin acid rece	C 479	14.6	0.8	21	1	AAAF78643	PCR primer for mec
C 407	15	0.9	23	1	ACF05660	Human DNA RT-PCR p	C 480	14.6	0.8	21	1	AAAF78643	PCR primer for mec
C 408	14.8	0.8	18	1	AAAB6682	Cdc 2 kinase hamme	C 481	14.6	0.8	21	1	AAAH40014	SNP specific lower
C 409	14.8	0.8	18	1	AAAB6682	Cdc 2 kinase hamme	C 482	14.6	0.8	21	1	AAAH40014	Primer PHN3381, t
C 410	14.8	0.8	18	1	AAAB6682	Cdc 2 kinase hamme	C 483	14.6	0.8	21	1	AAAH40014	YMD oligonucleoti
C 411	14.8	0.8	18	1	AAZ77171	Human biallelic ma	C 484	14.6	0.8	21	1	AAAH40014	YMD oligonucleoti
C 412	14.8	0.8	18	1	AAH61848	Cdc 2 kinase hamme	C 485	14.6	0.8	21	1	AAAH40014	YMD oligonucleoti
C 413	14.8	0.8	18	1	AAH61848	Cdc 2 kinase hamme	C 486	14.6	0.8	21	1	AAAH40014	YMD oligonucleoti
C 414	14.8	0.8	18	1	AAH61848	Cdc 2 kinase hamme	C 487	14.6	0.8	21	1	AAAH40014	YMD oligonucleoti
C 415	14.8	0.8	18	1	ACA60596	Antisense inhibiti	C 488	14.6	0.8	21	1	AAAH40014	Human androgen rec
C 416	14.8	0.8	18	1	AD334621	Human guanylate bi	C 489	14.6	0.8	21	1	ABK53794	DMS-acceptor oxido
C 417	14.8	0.8	18	1	AAAB2995	cdk6 ribozyme bind	C 490	14.6	0.8	21	1	ABK53794	Human TNFR2 forwar
C 418	14.8	0.8	18	1	AAAB2995	cdk2 ribozyme bind	C 491	14.6	0.8	21	1	ABK53794	Human TNFR2 forwar
C 419	14.8	0.8	18	1	AAAB2995	Cyclin D1 ribozyme	C 492	14.6	0.8	21	1	ABK53794	Nucleic acid encod
C 420	14.8	0.8	18	1	AAAB2995	Cell-cycle depende	C 493	14.6	0.8	21	1	ABK53794	Rat ERK-3 Designed
C 421	14.8	0.8	18	1	AAH58161	Cyclin D1 ribozyme	C 494	14.6	0.8	21	1	ABK53794	Human KIAA0172 ass
C 422	14.8	0.8	18	1	AAH57781	Cell-cycle depende	C 495	14.6	0.8	21	1	ABK53794	Baculovirus C2 com
C 423	14.8	0.8	20	1	AAV12449	Growth hormone rec	C 496	14.6	0.8	21	1	ABK53794	Human apolipoprote
C 424	14.8	0.8	20	1	AAV52661	Hepatocyte nuclear	C 497	14.6	0.8	21	1	ABK53794	Single nucleotide
C 425	14.8	0.8	20	1	AAZ01841	PCR primer used to	C 498	14.6	0.8	21	1	ABK53794	Reverse primer #26
C 426	14.8	0.8	20	1	AAZ01841	PCR primer H11791	C 499	14.6	0.8	21	1	ABK53794	Primer A #1 used a
C 427	14.8	0.8	20	1	AAZ23550	Deletion sequence	C 500	14.6	0.8	21	1	ABK53794	Human automated ge
C 428	14.8	0.8	20	1	AAZ23550	PCR primer used to	C 501	14.6	0.8	21	1	ABK53794	Candida albicans G
C 429	14.8	0.8	20	1	AAZ23550	Human STAT3 phosph	C 502	14.6	0.8	21	1	ABK53794	Human NOV1 forward
C 430	14.8	0.8	20	1	AAZ23550	Human STAT3 phosph	C 503	14.6	0.8	21	1	ABK53794	Human NOV1 forward
C 431	14.8	0.8	20	1	AAZ23550	Human NADH ubiquti	C 504	14.6	0.8	21	1	ABK53794	Bacillus sp novel
C 432	14.8	0.8	20	1	AAZ23550	Human NADH ubiquti	C 505	14.6	0.8	21	1	ABK53794	Bacillus sp novel
C 433	14.8	0.8	20	1	AAZ23550	Human STAT3 antise	C 506	14.6	0.8	21	1	ABK53794	Human NOV2 gene PC
C 434	14.8	0.8	20	1	AAZ23550	Human STAT3 antise	C 507	14.6	0.8	21	1	ABK53794	Human NOV1 gene PC
C 435	14.8	0.8	20	1	AAZ23550	Human STAT3 antise	C 508	14.6	0.8	21	1	ABK53794	Human NOV2 gene PC
C 436	14.8	0.8	20	1	AAZ23550	Human STAT3 antise	C 509	14.6	0.8	21	1	ABK53794	Human NOV2 gene PC
C 437	14.8	0.8	20	1	AAZ23550	Human dual specific	C 510	14.6	0.8	21	1	ABK53794	Human NOVX DNA PCR
C 438	14.8	0.8	20	1	AAZ23550	Mouse CLASP-5 PCR	C 511	14.6	0.8	21	1	ABK53794	Human HDAC9 exon 4
C 439	14.8	0.8	20	1	AAZ23550	Human HKRI phospho	C 512	14.6	0.8	21	1	ABK53794	Mouse and human mi
C 440	14.8	0.8	20	1	AAZ23550	MHC class II trans	C 513	14.6	0.8	21	1	ABK53794	RTQ-PCR primer #1
C 441	14.8	0.8	20	1	AAZ23550	IGF503 polymorphis	C 514	14.6	0.8	21	1	ABK53794	PCR primer PI used
C 442	14.8	0.8	20	1	AAZ23550	Forward AG5335 RT-	C 515	14.6	0.8	21	1	ABK53794	Human NOV1 RTQ PCR
C 443	14.8	0.8	20	1	AAZ23550	Human biallelic po	C 516	14.6	0.8	21	1	ABK53794	Human NOV2 RTQ PCR
C 444	14.8	0.8	20	1	AAZ23550	Cancer associated	C 517	14.6	0.8	21	1	ABK53794	Human NOV1 RTQ PCR
C 445	14.8	0.8	20	1	AAZ23550	Human polymorphic	C 518	14.6	0.8	21	1	ABK53794	Human NOV1 RTQ PCR
C 446	14.8	0.8	20	1	AAZ23550	Human polymorphic	C 519	14.6	0.8	21	1	ABK53794	Stage 2 MSP primer
C 447	14.8	0.8	20	1	AAZ23550	Bacterial chemokine r	C 520	14.6	0.8	21	1	ABK53794	DNA primer for hum
C 448	14.8	0.8	20	1	AAZ23550	Primer for domain	C 521	14.6	0.8	21	1	ABK53794	Human IGA membrane
C 449	14.8	0.8	20	1	AAZ23550	Primer #2 for immu	C 522	14.6	0.8	21	1	ABK53794	Human IL-2 recepto
C 450	14.8	0.8	20	1	AAZ23550	Immunoglobulin kap	C 523	14.6	0.8	21	1	ABK53794	Membrane extracell
C 451	14.8	0.8	20	1	AAZ23550	Primer Vb3-R for h	C 524	14.6	0.8	21	1	ABK53794	Human CD20 G-cleav
C 452	14.8	0.8	20	1	AAZ23550	Primer 2 for human	C 525	14.6	0.8	21	1	ABK53794	Human CD20 G-cleav
C 453	14.8	0.8	20	1	AAZ23550	SNP specific lower	C 526	14.6	0.8	21	1	ABK53794	HBa2 mutation corr
C 454	14.8	0.8	20	1	AAZ23550	PCR primer Vkap3	C 527	14.6	0.8	21	1	ABK53794	HBa2 mutation corr
C 455	14.8	0.8	20	1	AAZ23550	NOVX reverse PCR p	C 528	14.6	0.8	21	1	ABK53794	Primer #3 used to
C 456	14.8	0.8	20	1	AAZ23550	Novel human protei	C 529	14.6	0.8	21	1	ABK53794	Human multi drug r
C 457	14.8	0.8	20	1	AAZ23550	Human NOVX DNA PCR	C 530	14.6	0.8	21	1	ABK53794	Human HTPL scannin
C 458	14.6	0.8	20	1	AAZ23550	Reverse primer #24	C 531	14.6	0.8	21	1	ABK53794	Human HTPL scannin
C 459	14.6	0.8	20	1	AAZ23550	Human CTR gene up	C 532	14.6	0.8	21	1	ABK53794	Human ERG DNazyme
C 460	14.6	0.8	20	1	AAZ23550	Potato PPO primer	C 533	14.6	0.8	21	1	ABK53794	Human ERG DNazyme
C 461	14.6	0.8	20	1	AAZ23550	HEV strain BUR-121	C 534	14.6	0.8	21	1	ABK53794	Human ERG hammethe
C 462	14.6	0.8	20	1	AAZ23550	Primer B2 (Group 4	C 535	14.6	0.8	21	1	ABK53794	Human ERG hammethe
C 463	14.6	0.8	20	1	AAZ23550	HEV strain Burma-1	C 536	14.6	0.8	21	1	ABK53794	Human PAPP-Ea asso
C 464	14.6	0.8	20	1	AAZ23550	HEV ORF proteins e	C 537	14.6	0.8	21	1	ABK53794	Human PAPP-Ea asso
C 465	14.6	0.8	20	1	AAZ23550	Human ICAM-1, E-se	C 538	14.6	0.8	21	1	ABK53794	Human CLCA1 gene e
C 466	14.6	0.8	20	1	AAZ23550	Human polymorphic	C 539	14.6	0.8	21	1	ABK53794	Human CLCA1 gene e
C 467	14.6	0.8	20	1	AAZ23550	Human Lkb1 gene pr	C 540	14.6	0.8	21	1	ABK53794	Human CLCA1 gene e
C 468	14.6	0.8	20	1	AAZ23550	Tumour necrosis fa	C 541	14.6	0.8	21	1	ABK53794	Human CLCA1 gene e
C 469	14.6	0.8	20	1	AAZ23550	HSV-2 ICP6 gene pr	C 542	14.6	0.8	21	1	ABK53794	Tumour suppression
C 470	14.6	0.8	20	1	AAZ23550	Human biallelic ma	C 543	14.6	0.8	21	1	ABK53794	Human HER2 DNazyme
C 471	14.6	0.8	20	1	AAZ23550	Human biallelic ma	C 544	14.6	0.8	21	1	ABK53794	Human K-Ras DNazyme

545	17	1	ACC74114	Human CYP2D6 targe	618	14.4	0.8	22	1	ACC82981	Outer reverse PCR
546	17	1	ACC74113	Human CYP2D6 targe	619	14.4	0.8	22	1	ADB84281	Rat CLC1 gene PCR
547	18	1	AAV05962	Oligonucleotide fo	620	14.2	0.8	19	1	AAI11978	CMV antisense olig
548	18	1	AAZ41020	Cellular inhibitor	621	14.2	0.8	19	1	AAI11971	CMV antisense olig
549	18	1	AAZ22114	Human c-IAP-2 mRNA	622	14.2	0.8	19	1	AAI11971	Peptide nucleic ac
550	18	1	AAZ20371	Human biallelic ma	623	14.2	0.8	19	1	AAI11971	Peptide nucleic ac
551	18	1	AAZ20371	Antisense oligo, I	624	14.2	0.8	19	1	AAQ95226	Simple tandem repe
552	18	1	ABQ65383	Human gene methyl	625	14.2	0.8	19	1	AAI10879	Human cytochrome P
553	18	1	ABK34171	Human UNG PCR prim	626	14.2	0.8	19	1	AAV41067	Primer TEL114U19
554	18	1	ABK28109	Human UNG methylat	627	14.2	0.8	19	1	AAV41067	lacZ-specific prim
555	18	1	ABD41922	Human SRC-1 antise	628	14.2	0.8	19	1	AAV26433	Anti-CMV oligonucle
556	18	1	ABZ10908	Haematopoietic cel	629	14.2	0.8	19	1	AAI17888	Anti-CMV oligonucle
557	18	1	ADA20557	Prostate tumour re	630	14.2	0.8	19	1	AAI17895	cdk2 ribozyme bind
558	18	1	ADA43360	Human UNG PCR prim	631	14.2	0.8	19	1	AAA82663	cdk2 ribozyme bind
559	18	1	ADA43360	Human UNG PCR prim	632	14.2	0.8	19	1	AAA82663	cdk2 ribozyme bind
560	18	1	ADG60440	Human c-IAP-2 anti	633	14.2	0.8	19	1	AAA82895	cdk4 ribozyme bind
561	19	1	AAV74921	3'-primer for HLA	634	14.2	0.8	19	1	AAA83090	cdk7 ribozyme bind
562	19	1	AAV13329	Sense primer Exon	635	14.2	0.8	19	1	AAA82766	cdk3 ribozyme bind
563	19	1	AAV2758	cdk3 ribozyme bind	636	14.2	0.8	19	1	AAA82998	cdk6 ribozyme bind
564	19	1	AAJ14782	PCR primer used to	637	14.2	0.8	19	1	AAA82631	cdk2 ribozyme bind
565	19	1	AAZ57134	Phosphorothioate l	638	14.2	0.8	19	1	AAA82662	cdk2 ribozyme bind
566	19	1	AAZ57134	PCR primer for ost	639	14.2	0.8	19	1	AAA83089	cdk7 ribozyme bind
567	19	1	AAH57920	Cell-cycle depende	640	14.2	0.8	19	1	AAZ40735	Primer 1 used in t
568	19	1	AAH51775	TNF alpha PCR prim	641	14.2	0.8	19	1	AAZ40735	PCR primer specifi
569	19	1	ADA25683	Human REL-A short	642	14.2	0.8	19	1	AAZ40735	Human multi drug r
570	19	1	ADA26032	tdh 4. Synthetic.	643	14.2	0.8	19	1	AAZ40735	Human multi drug r
571	20	1	AAQ30930	PCR primer-b to am	644	14.2	0.8	19	1	AAH57928	Cell-cycle depende
572	20	1	AAQ42491	Vibrio parahaemoly	645	14.2	0.8	19	1	AAH57928	Cell-cycle depende
573	20	1	AAQ46093	Oligonucleotide us	646	14.2	0.8	19	1	AAH58252	Cell-cycle depende
574	20	1	AAQ46093	PCR primer used fo	647	14.2	0.8	19	1	AAH58251	Cell-cycle depende
575	20	1	AAQ46096	Vibrio parahaemoly	648	14.2	0.8	19	1	AAH58057	Cell-cycle depende
576	20	1	AAQ68498	Tyrosine kinase Tn	649	14.2	0.8	19	1	AAH57792	Cell-cycle depende
577	20	1	AAQ60442	Oligo #2 used to i	650	14.2	0.8	19	1	AAH57793	Cell-cycle depende
578	20	1	AAQ85490	Primer #2 for immu	651	14.2	0.8	19	1	AAH57825	Cell-cycle depende
579	20	1	AAQ92765	Human biallelic po	652	14.2	0.8	19	1	AAH57826	Cell-cycle depende
580	20	1	AAQ10122	3' RACE internal P	653	14.2	0.8	19	1	AAH57826	Hiv-1 related bind
581	20	1	AAV16342	Human EP3 receptor	654	14.2	0.8	19	1	ABL88857	Hiv-1 related bind
582	20	1	AAV29622	Immunoglobulin kap	655	14.2	0.8	19	1	ABL88857	Hiv-1 related bind
583	20	1	AAV29622	Primer 1192-1161 f	656	14.2	0.8	19	1	ABL88857	Hiv-1 related bind
584	20	1	AAV29918	Primer 1192-1161 f	657	14.2	0.8	19	1	ABL88857	Mucor circinelloid
585	20	1	AAV29918	Hepatitis B virus	658	14.2	0.8	19	1	ABL88857	Mucor circinelloid
586	20	1	AAV79747	Primer 2 for human	659	14.2	0.8	19	1	ABL88857	Human serotonin 1B
587	20	1	AAV09925	Human E2F transcri	660	14.2	0.8	19	1	ABL88857	Human serotonin 1B
588	20	1	AAV09925	V parahaemolyticus	661	14.2	0.8	19	1	ABL88857	Human serotonin 1B
589	20	1	AAV09925	Human SFRP4 gene s	662	14.2	0.8	19	1	ABL88857	Human serotonin 1B
590	20	1	AAV17411	V parahaemolyticus	663	14.2	0.8	19	1	ABL88857	Human serotonin 1B
591	20	1	AAV17411	Rice promoter spec	664	14.2	0.8	19	1	ABL88857	Human serotonin 1B
592	20	1	AAV22485	Human Nck-2 phosph	665	14.2	0.8	19	1	ABL88857	Human serotonin 1B
593	20	1	AAV22485	V parahaemolyticus	666	14.2	0.8	19	1	ABL88857	Human serotonin 1B
594	20	1	AAV2716	PCR primer REL39.	667	14.2	0.8	19	1	ABL88857	Human serotonin 1B
595	20	1	AAV2716	Primer #3 related	668	14.2	0.8	19	1	ABL88857	Human serotonin 1B
596	20	1	AAV29526	Candida albicans G	669	14.2	0.8	19	1	ABL88857	Human serotonin 1B
597	20	1	AAV29526	Chimeric phosphoro	670	14.2	0.8	19	1	ABL88857	Human serotonin 1B
598	20	1	AAV29526	Capture oligonucle	671	14.2	0.8	19	1	ABL88857	Human serotonin 1B
599	20	1	AAV29526	Human oligonucleot	672	14.2	0.8	19	1	ABL88857	Human serotonin 1B
600	20	1	AAV29526	Human oligonucleot	673	14.2	0.8	19	1	ABL88857	Human serotonin 1B
601	20	1	AAV29526	Human oligonucleot	674	14.2	0.8	19	1	ABL88857	Human serotonin 1B
602	20	1	AAV29526	PCR primer used to	675	14.2	0.8	19	1	ABL88857	Human serotonin 1B
603	20	1	AAV29526	Mouse IGF-beta rec	676	14.2	0.8	19	1	ABL88857	Human serotonin 1B
604	20	1	AAV29526	NANBHV primer. Sy	677	14.2	0.8	19	1	ABL88857	Human serotonin 1B
605	20	1	AAV29526	Exon 5 of an Enac	678	14.2	0.8	19	1	ABL88857	Human serotonin 1B
606	20	1	AAV29526	Human gene single	679	14.2	0.8	19	1	ABL88857	Human serotonin 1B
607	20	1	AAV29526	Frosty forward pri	680	14.2	0.8	19	1	ABL88857	Human serotonin 1B
608	20	1	AAV29526	Human single nucle	681	14.2	0.8	19	1	ABL88857	Human serotonin 1B
609	20	1	AAV29526	A. pullulans xyna	682	14.2	0.8	19	1	ABL88857	Human serotonin 1B
610	20	1	AAV29526	Human multidrug re	683	14.2	0.8	19	1	ABL88857	Human serotonin 1B
611	20	1	AAV29526	Human familial bip	684	14.2	0.8	19	1	ABL88857	Human serotonin 1B
612	20	1	AAV29526	Pro-alpha(III) ch	685	14.2	0.8	19	1	ABL88857	Human serotonin 1B
613	20	1	AAV29526	PCR primer 7 for D	686	14.2	0.8	19	1	ABL88857	Human serotonin 1B
614	20	1	AAV29526	Human biallelic po	687	14.2	0.8	19	1	ABL88857	Human serotonin 1B
615	20	1	AAV29526	Reverse primer for	688	14.2	0.8	19	1	ABL88857	Human serotonin 1B
616	20	1	AAV29526	Human papilloma vi	689	14.2	0.8	19	1	ABL88857	Human serotonin 1B
617	20	1	AAV29526		690	14.2	0.8	19	1	ABL88857	Human serotonin 1B

C 691	14.2	0.8	20	1	AAT66009	Primer #2 to ampli	764	14.2	0.8	20	1	ABQ75387	Human RNase H1I an
C 692	14.2	0.8	20	1	AAT84760	Primer ITS2 for Ca	C 765	14.2	0.8	20	1	ABQ75387	Human RNase H1I an
C 693	14.2	0.8	20	1	AAT84762	Primer ITS4 for Ca	C 766	14.2	0.8	20	1	ABL59026	Nucleotide sequenc
C 694	14.2	0.8	20	1	AAT75521	Candida universal	767	14.2	0.8	20	1	ABQ93219	T. tauschii/wheat
C 695	14.2	0.8	20	1	AAT75523	Candida universal	768	14.2	0.8	20	1	ABA89986	Oestrogen receptor
C 696	14.2	0.8	20	1	AAT68379	Loc1-specific prim	769	14.2	0.8	20	1	AAD39532	Human calreticulin
C 697	14.2	0.8	20	1	AAT62540	Ribosomal Gene 5.8	770	14.2	0.8	20	1	ABL44407	Human chromosome 1
C 698	14.2	0.8	20	1	AAV62539	Ribosomal Gene 5.8	771	14.2	0.8	20	1	ABT05202	TNFR1 expression m
C 699	14.2	0.8	20	1	AAV59027	Internal transcrib	C 772	14.2	0.8	20	1	ABK27372	Mutant gamma-amino
C 700	14.2	0.8	20	1	AAV59024	Internal transcrib	C 773	14.2	0.8	20	1	ABA94547	Mycosphaerella spe
C 701	14.2	0.8	20	1	AAV43273	PCR primer ITS3 us	C 774	14.2	0.8	20	1	ABA94548	Mycosphaerella spe
C 702	14.2	0.8	20	1	AAV43272	PCR primer ITS2 us	C 775	14.2	0.8	20	1	ABV78756	Cordyceps PCR prim
C 703	14.2	0.8	20	1	AAV11551	Human lipid metabo	776	14.2	0.8	20	1	ABV78755	Cordyceps PCR prim
C 704	14.2	0.8	20	1	AAV42503	PCR primer 2 used	777	14.2	0.8	20	1	ABD34903	Human E2F transcri
C 705	14.2	0.8	20	1	AAV22643	PCR primer specific	778	14.2	0.8	20	1	ABD38471	Bovine MHC class I
C 706	14.2	0.8	20	1	AAV18199	Primer for Ranconi	C 779	14.2	0.8	20	1	AAS96666	Telomerase reverse
C 707	14.2	0.8	20	1	AAV70045	Rat C-Fos protein	C 780	14.2	0.8	20	1	AB195967	Capture oligonucle
C 708	14.2	0.8	20	1	AAV24006	Primer ITS3 for Ca	C 781	14.2	0.8	20	1	AB193287	Capture oligonucle
C 709	14.2	0.8	20	1	AAV24009	Primer ITS2 for Ca	C 782	14.2	0.8	20	1	AB193148	Capture oligonucle
C 710	14.2	0.8	20	1	AAT89974	Candida albicans I	783	14.2	0.8	20	1	ABQ87695	Human ESR1 exon 1G
C 711	14.2	0.8	20	1	AAT89976	Candida albicans I	784	14.2	0.8	20	1	ABQ87695	Human ESR1 exon 1G
C 712	14.2	0.8	20	1	AAV17950	Anti-CMV oligonuc	C 785	14.2	0.8	20	1	ABZ85058	Human oligonucleot
C 713	14.2	0.8	20	1	AAV17890	Anti-CMV oligonuc	C 786	14.2	0.8	20	1	ABZ85420	Human oligonucleot
C 714	14.2	0.8	20	1	AAZ18075	MAP 5 gene specifi	C 787	14.2	0.8	20	1	ABZ85420	Human oligonucleot
C 715	14.2	0.8	20	1	AAZ18074	MAP 4 gene specifi	C 788	14.2	0.8	20	1	ABZ84777	Human oligonucleot
C 716	14.2	0.8	20	1	AAZ18077	MAP 6 gene specifi	C 789	14.2	0.8	20	1	ABZ87947	Human oligonucleot
C 717	14.2	0.8	20	1	AAZ18193	Serine threonine k	C 790	14.2	0.8	20	1	ABZ87022	Human oligonucleot
C 718	14.2	0.8	20	1	AAZ18198	Serine threonine k	C 791	14.2	0.8	20	1	ABZ88149	Human oligonucleot
C 719	14.2	0.8	20	1	AAV70875	PCR primer ITS3 fo	C 792	14.2	0.8	20	1	ABZ87509	Human oligonucleot
C 720	14.2	0.8	20	1	AAV26351	PCR primer 2S used	C 793	14.2	0.8	20	1	ABV77015	Primer ITS3 used t
C 721	14.2	0.8	20	1	AAZ03102	PCR primer used to	C 794	14.2	0.8	20	1	ABV77014	Primer ITS2 used t
C 722	14.2	0.8	20	1	AAZ05087	PCR primer used to	C 795	14.2	0.8	20	1	ACA61050	Guignardia interna
C 723	14.2	0.8	20	1	AAZ03873	PCR primer used to	C 796	14.2	0.8	20	1	ACA61051	Guignardia interna
C 724	14.2	0.8	20	1	AAZ04109	PCR primer used to	C 797	14.2	0.8	20	1	ABZ21316	PCR primer for the
C 725	14.2	0.8	20	1	AAZ06548	Oligonucleotide pr	C 798	14.2	0.8	20	1	ADA44788	Antisense oligonuc
C 726	14.2	0.8	20	1	AAZ06549	Oligonucleotide pr	C 799	14.2	0.8	20	1	ABT34198	Mouse short hetero
C 727	14.2	0.8	20	1	AAZ89549	PCR primer trb fo	C 800	14.2	0.8	20	1	ACC49703	Human KSR chimeric
C 728	14.2	0.8	20	1	AAZ23552	Deletion sequence	C 801	14.2	0.8	20	1	ACC50005	Oligonucleotide pr
C 729	14.2	0.8	20	1	AAZ36433	PCR primer used to	C 802	14.2	0.8	20	1	ACC50004	Oligonucleotide pr
C 730	14.2	0.8	20	1	AAZ27102	Primer for Candida	C 803	14.2	0.8	20	1	ABV99905	Streptococcus ther
C 731	14.2	0.8	20	1	AAZ22586	PCR primer #2 for	C 804	14.2	0.8	20	1	ABV99526	Mouse src-c chimere
C 732	14.2	0.8	20	1	AAZ29421	Rat JNK1-specific	C 805	14.2	0.8	20	1	ADA26668	Rat Jun N-terminal
C 733	14.2	0.8	20	1	AAV13128	P13K antisense inh	C 806	14.2	0.8	20	1	AAD52299	Human IFNGR2 antis
C 734	14.2	0.8	20	1	AAV07709	Human collectin se	C 807	14.2	0.8	20	1	AAD55498	Human IFNGR-3 antis
C 735	14.2	0.8	20	1	AAZ95024	Prostate cancer di	C 808	14.2	0.8	20	1	AAV55617	Fungal universal I
C 736	14.2	0.8	20	1	AAZ40718	Primer for sequenc	C 809	14.2	0.8	20	1	ACC43371	PCR primer #14 for
C 737	14.2	0.8	20	1	AAZ72227	Human biallelic ma	C 810	14.2	0.8	20	1	ACC47147	Nucleotide sequenc
C 738	14.2	0.8	20	1	AAZ99697	CC92 heavy chain o	C 811	14.2	0.8	20	1	AAV62456	Human ABC transpor
C 739	14.2	0.8	20	1	AAZ99714	VhalpharAG oligonu	C 812	14.2	0.8	20	1	AAV60972	Human MyD88 antis
C 740	14.2	0.8	20	1	AAV72056	Japanese citrus vi	C 813	14.2	0.8	20	1	ADC36216	Weed controller me
C 741	14.2	0.8	20	1	AAV62964	JNK antisense olig	C 814	14.2	0.8	20	1	ADC35560	Human CD81/TAPA-1
C 742	14.2	0.8	20	1	AAV94772	PCR primer ITS2 us	C 815	14.2	0.8	20	1	AAQ51806	Encodes ballast co
C 743	14.2	0.8	20	1	AAV94773	PCR primer ITS3 us	C 816	14.2	0.8	20	1	AAQ57291	Enzymatic RNA mole
C 744	14.2	0.8	20	1	AAV72341	Single nucleotide	C 817	14.2	0.8	20	1	AAV42247	Primer derived fro
C 745	14.2	0.8	20	1	AAV72320	Single nucleotide	C 818	14.2	0.8	20	1	AAV51809	Zea mays genome re
C 746	14.2	0.8	20	1	AAV72296	3' primer used to	C 819	14.2	0.8	20	1	AAV51812	Zea mays genome re
C 747	14.2	0.8	20	1	AAV90638	Mouse immunoglobul	C 820	14.2	0.8	20	1	AAV09125	Human biallelic po
C 748	14.2	0.8	20	1	AAV03547	Oligonucleotide #6	C 821	14.2	0.8	20	1	AAV08249	PCR primer ABCR-EX
C 749	14.2	0.8	20	1	AAH46457	Guar and locust be	C 822	14.2	0.8	20	1	AAV62007	L monocytogenes hl
C 750	14.2	0.8	20	1	AAH44591	Internal transcrib	C 823	14.2	0.8	20	1	AAZ26124	Human polymorphic
C 751	14.2	0.8	20	1	AAH44593	Internal transcrib	C 824	14.2	0.8	20	1	AAZ26242	Human polymorphic
C 752	14.2	0.8	20	1	AAV08396	Internal transcrib	C 825	14.2	0.8	20	1	AAZ26102	Human polymorphic
C 753	14.2	0.8	20	1	AAV08397	Universal fungal i	C 826	14.2	0.8	20	1	AAV17882	Anti-CMV oligonuc
C 754	14.2	0.8	20	1	AAV91160	Universal fungal i	C 827	14.2	0.8	20	1	AAA07030	Human integrin bet
C 755	14.2	0.8	20	1	AAV91162	Human interferon r	C 828	14.2	0.8	20	1	AAV59350	Human SFR2 gene pr
C 756	14.2	0.8	20	1	AAH46289	Human cytohesin-2	C 829	14.2	0.8	20	1	AAZ73744	Human biallelic ma
C 757	14.2	0.8	20	1	AAH96755	16S/23S rRNA spacer	C 830	14.2	0.8	20	1	AAZ56234	Mutated Influenza
C 758	14.2	0.8	20	1	AAH97777	Guignardia citrica	C 831	14.2	0.8	20	1	AAE97537	Human gene single
C 759	14.2	0.8	20	1	AAH73769	Guignardia citrica	C 832	14.2	0.8	20	1	AAE95512	Human gene single
C 760	14.2	0.8	20	1	AAH73770	Phytophthora infes	C 833	14.2	0.8	20	1	AAE96385	Human gene single
C 761	14.2	0.8	20	1	ABN95668	Human caspase 2 an	C 834	14.2	0.8	20	1	AAH62348	ATP3 polymorphism
C 762	14.2	0.8	20	1	ABN74847	Mouse RAIDD antis	C 835	14.2	0.8	20	1	AAH62637	Opiate receptor li
C 763	14.2	0.8	20	1	ABK95760		C 836	14.2	0.8	20	1	AAV75649	Murine ztrypl codi

C 837	14.2	0.8	21	1	AAF90246	PCR primer for UDP	910	14	0.8	20	1	AAAD12619	Human ANC_2H01 cDN
C 838	14.2	0.8	21	1	AAF87687	Human RecQ5 type D	C 911	14	0.8	20	1	ABZ93277	Human oligonucleot
C 839	14.2	0.8	21	1	AAAC86918	Critical sequence	C 912	14	0.8	20	1	ABZ22802	Human nsparanase p
C 840	14.2	0.8	21	1	AAAD09996	Mus musculus goose	C 913	14	0.8	20	1	ACC86848	Mouse VSGFR-1 chim
C 841	14.2	0.8	21	1	ABK65778	Human single nucle	914	14	0.8	21	1	AAAX09162	Human biallelic po
C 842	14.2	0.8	21	1	ABK65823	Human single nucle	915	14	0.8	21	1	AAV08201	PCR primer used to
C 843	14.2	0.8	21	1	ABK40345	Forward PCR primer	C 916	14	0.8	21	1	AAAX35653	PCR primer hpl-629
C 844	14.2	0.8	21	1	ABK60153	Human polymorphism	C 917	14	0.8	21	1	AAAX75055	Human interleukin-
C 845	14.2	0.8	21	1	ABK60250	Human polymorphism	918	14	0.8	21	1	AAH28645	PKI PCR primer ov
C 846	14.2	0.8	21	1	ABK60249	Human polymorphism	919	14	0.8	21	1	ABL53717	S. cerevisiae Pk1
C 847	14.2	0.8	21	1	ABK60767	Human aquaporin 5	920	14	0.8	21	1	ABZ57693	Human src biomarke
C 848	14.2	0.8	21	1	ABK61245	Human aquaporin 5	921	14	0.8	21	1	ADD14266	Rat ICAM hammergea
C 849	14.2	0.8	21	1	ABK61241	Human aquaporin 5	922	13.8	0.8	17	1	AAAT53444	Human c-myb hamme
C 850	14.2	0.8	21	1	ABK61247	Human aquaporin 5	C 923	13.8	0.8	17	1	AAAT81489	Human c-myb hamme
C 851	14.2	0.8	21	1	ABL43257	Rat metallothionei	C 924	13.8	0.8	17	1	AAAT81488	Human c-myb hamme
C 852	14.2	0.8	21	1	ABN88844	Human epoxide hydr	925	13.8	0.8	17	1	AAAT50895	Probe #9 for inter
C 853	14.2	0.8	21	1	ABN97586	Human epoxide hydr	926	13.8	0.8	17	1	AAAT74472	Human KDR VEGF rec
C 854	14.2	0.8	21	1	ABN97587	Human adipose prot	C 927	13.8	0.8	17	1	AAA23256	Integrin subunit b
C 855	14.2	0.8	21	1	ABK16378	Human adipose prot	928	13.8	0.8	17	1	AAV92551	Human A-Raf substr
C 856	14.2	0.8	21	1	ABK16377	Human UGRI1A7 codon	929	13.8	0.8	17	1	AAA36495	Human genomic SNP
C 857	14.2	0.8	21	1	ABL61474	Human AAGA SNP ana	C 930	13.8	0.8	17	1	AAAT72376	Mutant capture oli
C 858	14.2	0.8	21	1	ABK99015	Mouse zsig37 ortho	931	13.8	0.8	17	1	AAAT95069	Mouse angiotensin
C 859	14.2	0.8	21	1	ACD02587	Mouse adipose comp	932	13.8	0.8	17	1	ABN10018	Human GDMPLP-1 17-m
C 860	14.2	0.8	21	1	ABX04548	Human Folate recep	933	13.8	0.8	17	1	ABN08053	Human GDMPLP-1 17-m
C 861	14.2	0.8	21	1	ACD26013	Mouse tryptase-lik	C 934	13.8	0.8	17	1	ABN06504	Human GDMPLP-1 17-m
C 862	14.2	0.8	21	1	ACD25911	Human zsig37 cDNA	C 935	13.8	0.8	17	1	ABN01534	Human GDMPLP-1 17-m
C 863	14.2	0.8	21	1	ADCL01959	Mouse serine prote	C 936	13.8	0.8	17	1	ABN10672	Human GDMPLP-1 17-m
C 864	14.2	0.8	21	1	ADCL1360	ZC18687 oligo used	C 937	13.8	0.8	17	1	ABN06803	Human KDM1A porti
C 865	14.2	0.8	21	1	AAV59914	Human src biomarke	C 938	13.8	0.8	17	1	ABO63455	Human ERG G-leave
C 866	14.2	0.8	21	1	ADL14411	HPV detection meth	939	13.8	0.8	17	1	ABK18593	Human ERG DNzyme
C 867	14.2	0.8	21	1	ADCL4418	Human relA hammerh	940	13.8	0.8	17	1	ABK18786	Human PAP-Ea asso
C 868	14	0.8	15	1	AAV55032	IGF-I oligonucleot	941	13.8	0.8	17	1	ABV75049	Human PAP-Ea asso
C 869	14	0.8	15	1	AAV50620	IGF-I oligonucleot	942	13.8	0.8	17	1	ABV89395	Human POSHL1 scann
C 870	14	0.8	15	1	AAV50616	Resistance genes m	C 943	13.8	0.8	17	1	ABV89567	Human POSHL1 scann
C 871	14	0.8	15	1	ABX04035	Mouse flt-1 VEGF r	C 944	13.8	0.8	17	1	ABV91270	Human CLCA1 gene e
C 872	14	0.8	17	1	AAV74928	Human KDR VEGF rec	945	13.8	0.8	17	1	ABK56437	Human CLCA1 gene e
C 873	14	0.8	17	1	AAV74137	Mouse flt-1 VEGF r	946	13.8	0.8	17	1	ABK57127	Human CLCA1 gene e
C 874	14	0.8	17	1	AAV74911	Mouse flt-1 VEGF r	947	13.8	0.8	17	1	ABK56438	Human MDZ7 scannin
C 875	14	0.8	17	1	AAV74927	Human EGF-R target	948	13.8	0.8	17	1	ABZ50435	Human K-Ras DNzyme
C 876	14	0.8	17	1	AAV97498	Human EGF-R target	949	13.8	0.8	17	1	ABZ59905	Human HER2 DNzyme
C 877	14	0.8	17	1	AAV97497	Human NOGO Ambery	C 950	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 878	14	0.8	17	1	ABK02332	Human NOGO Zinzyne	C 951	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 879	14	0.8	17	1	ABK01785	Human NOGO Inozyme	C 952	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 880	14	0.8	17	1	ABK00760	Human GRID hammerh	C 953	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 881	14	0.8	17	1	ABL46440	Human GRID hammerh	C 954	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 882	14	0.8	17	1	ABL46441	Human GRID hammerh	C 955	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 883	14	0.8	17	1	ABL46442	Human GRID hammerh	C 956	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 884	14	0.8	17	1	ABL46443	Human PAP-Ea asso	957	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 885	14	0.8	17	1	ABZ5015	Human PAP-Ea asso	C 958	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 886	14	0.8	17	1	ABZ5016	3900 PCR primer, t	C 959	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 887	14	0.8	17	1	ABZ5017	Tumour suppression	C 960	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 888	14	0.8	17	1	ABZ5018	NFKB sub-unit modu	C 961	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 889	14	0.8	17	1	ABZ5019	Human H-Ras DNzyme	C 962	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 890	14	0.8	17	1	ABZ5020	Human H-Ras DNzyme	C 963	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 891	14	0.8	17	1	ABZ5021	Cancer based on Cy	964	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 892	14	0.8	17	1	ABZ5022	MRP1 based cancer	C 965	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 893	14	0.8	17	1	ABZ5023	Human UGT1A1 varia	C 966	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 894	14	0.8	17	1	ABZ5024	Human UGT1A1 varia	C 967	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 895	14	0.8	17	1	ABZ5025	Human MDR1 variant	C 968	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 896	14	0.8	17	1	ABZ5026	Human MDR1 variant	C 969	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 897	14	0.8	17	1	ABZ5027	Human ELK-1 phosph	C 970	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 898	14	0.8	17	1	ABZ5028	ELK-1 expression m	C 971	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 899	14	0.8	17	1	ABZ5029	Human ELK-1 PCR pr	C 972	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 900	14	0.8	17	1	ABZ5030	Human ELK-1 PCR pr	C 973	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 901	14	0.8	17	1	ABZ5031	Primer oligo used	C 974	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 902	14	0.8	17	1	ABZ5032	Human adult thymus	C 975	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 903	14	0.8	17	1	ABZ5033	cdk2 ribozyme bind	C 976	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 904	14	0.8	17	1	ABZ5034	Cell-cycle depende	C 977	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 905	14	0.8	17	1	ABZ5035	Clostridium histol	C 978	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 906	14	0.8	17	1	ABZ5036	Human alpha-2BAR g	C 979	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 907	14	0.8	17	1	ABZ5037	Human catenin-bind	C 980	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 908	14	0.8	17	1	ABZ5038	Human catenin-bind	C 981	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme
C 909	14	0.8	17	1	ABZ5039	Human ANC_2H01 cDN	C 982	13.8	0.8	17	1	ABZ65100	Human H-Ras DNzyme

983	13.8	0.8	18	1	ABA03355	Human clone WA15.1	c1056	13.8	0.8	20	1	AAV23934	Human cyclin-depen
984	13.8	0.8	18	1	AAI68749	Human cystatin C d	c1057	13.8	0.8	20	1	AAV05691	Barnase open readi
995	13.8	0.8	18	1	ABK14145	Chlorinated ethyle	1058	13.8	0.8	20	1	AAZ31303	CCR5 gene inhibiti
996	13.8	0.8	18	1	ABS64463	Human TGF-beta bin	1059	13.8	0.8	20	1	AAZ04231	PCR primer used to
997	13.8	0.8	18	1	ACD66643	Human inhibitor-ka	1060	13.8	0.8	20	1	AAZ02916	PCR primer used to
998	13.8	0.8	18	1	ADER4990	Beer spoilage-asso	c1061	13.8	0.8	20	1	AAZ05240	Deletion sequence
999	13.8	0.8	18	1	ADEI3509	HLA class I allele	c1062	13.8	0.8	20	1	AAZ23549	PCR primer used to
1000	13.8	0.8	19	1	AAE11974	CMV antisense olig	1063	13.8	0.8	20	1	AAZ92036	Human EST JRL4A1 a
1001	13.8	0.8	19	1	AAE101676	Peptide nucleic ac	1064	13.8	0.8	20	1	AAZ46520	Human biallelic ma
1002	13.8	0.8	19	1	AAE67044	PCR primer DP17 fo	c1065	13.8	0.8	20	1	AAZ69753	Human serine prote
1003	13.8	0.8	19	1	AAE10245	Human biallelic po	c1066	13.8	0.8	20	1	AAE61782	PCR primer used to
1004	13.8	0.8	19	1	AAV01575	H. capsulatum rRNA	c1067	13.8	0.8	20	1	AAE89471	Human jun N-termin
1005	13.8	0.8	19	1	AAE17891	Anti-CMV oligonucle	c1068	13.8	0.8	20	1	AAE29848	C. tropicalis CYP5
1006	13.8	0.8	19	1	AAE04627	PCR primer Taa4R u	1069	13.8	0.8	20	1	AAE30532	Anti-human Fas ant
1007	13.8	0.8	19	1	AAE36588	Probe hybridising	1070	13.8	0.8	20	1	AAE78243	Human dopamine bet
1008	13.8	0.8	19	1	AAE82434	cdk1 ribozyme bind	c1071	13.8	0.8	20	1	AAE59944	Human Lhx3 exon 6
1009	13.8	0.8	19	1	AAE28874	cdk4 ribozyme bind	1072	13.8	0.8	20	1	AAE92148	Human Lhx3 exon 6
1010	13.8	0.8	19	1	AAE82729	cdk3 ribozyme bind	1073	13.8	0.8	20	1	AAE66884	Dog genomic marker
1011	13.8	0.8	19	1	AAE84423	Cyclin D3 ribozyme	1074	13.8	0.8	20	1	AAE95171	Human cDNA clone-s
1012	13.8	0.8	19	1	AAE28887	cdk4 ribozyme bind	c1075	13.8	0.8	20	1	AAE20451	L. monocytogenes 1
1013	13.8	0.8	19	1	AAE83020	cdk6 ribozyme bind	1076	13.8	0.8	20	1	AAE23201	Human WMIF mRNA in
1014	13.8	0.8	19	1	AAE82748	cdk3 ribozyme bind	1077	13.8	0.8	20	1	AAE99813	Immunostimulatory
1015	13.8	0.8	19	1	AAE82639	cdk2 ribozyme bind	c1078	13.8	0.8	20	1	AAE48588	Human fascin assoc
1016	13.8	0.8	19	1	AAE82749	cdk3 ribozyme bind	c1079	13.8	0.8	20	1	AAE89128	Canine retroviral
1017	13.8	0.8	19	1	AAE91202	Human multi drug r	1080	13.8	0.8	20	1	AAE76258	Human GABA(A) rece
1018	13.8	0.8	19	1	AAE58036	Cell-cycle depende	1081	13.8	0.8	20	1	AAE80165	PCR primer used to
1019	13.8	0.8	19	1	AAE58036	Cell-cycle depende	c1082	13.8	0.8	20	1	AAE69712	Gene 216 SSCP dete
1020	13.8	0.8	19	1	AAE57801	Cyclin D3 ribozyme	c1083	13.8	0.8	20	1	AAE72182	Gene 216 SSCP dete
1021	13.8	0.8	19	1	AAE58182	Cell-cycle depende	1084	13.8	0.8	20	1	ABE71117	Rat GPCR ligand av
1022	13.8	0.8	19	1	AAE57891	Cell-cycle depende	c1085	13.8	0.8	20	1	ABE71117	PCR primer FV3 use
1023	13.8	0.8	19	1	AAE57910	Cell-cycle depende	c1086	13.8	0.8	20	1	ABE71117	Rice lesion inhibi
1024	13.8	0.8	19	1	AAE58049	Cell-cycle depende	c1087	13.8	0.8	20	1	AAE46967	Murine SAC1 gene-s
1025	13.8	0.8	19	1	AAE57596	Cell-cycle depende	1088	13.8	0.8	20	1	AAE97855	Human talin antise
1026	13.8	0.8	19	1	AAE57911	Cell-cycle depende	1089	13.8	0.8	20	1	ABE89264	Angiogenesis inhib
1027	13.8	0.8	19	1	AAE57829	Human casein kinas	c1090	13.8	0.8	20	1	ABE78535	Human LSR gene bia
1028	13.8	0.8	19	1	AAE98357	Chinese hamster HM	c1091	13.8	0.8	20	1	ABE41307	T. tauschii/wheat
1029	13.8	0.8	19	1	ABE43700	Human chromosome 1	c1092	13.8	0.8	20	1	ABE93162	Human NOV8 RTQ-PCR
1030	13.8	0.8	19	1	ABE95971	Human UDP-glucuron	1094	13.8	0.8	20	1	AAE40400	Mouse caspase 6 an
1031	13.8	0.8	19	1	ABE95971	Probe #46 for assa	1095	13.8	0.8	20	1	ABE373952	Human cytohesin-1
1032	13.8	0.8	19	1	ABE95971	Probe #31 for assa	1096	13.8	0.8	20	1	ABE43708	Human chromosome 1
1033	13.8	0.8	19	1	ABE95971	Probe #44 for assa	1097	13.8	0.8	20	1	ABE37172	Human MEK4 antise
1034	13.8	0.8	19	1	ABE95971	Probe #38 for assa	c1098	13.8	0.8	20	1	ABE06434	Cyclin 14-3-3 sign
1035	13.8	0.8	19	1	ABE95971	Cancer based on Cy	1099	13.8	0.8	20	1	ABE30969	Candida albicans G
1036	13.8	0.8	19	1	ABE95971	MRP1 based cancer	1100	13.8	0.8	20	1	ABE31379	Candida albicans G
1037	13.8	0.8	19	1	ABE95971	MRP1 based cancer	1101	13.8	0.8	20	1	ABE31379	Candida albicans G
1038	13.8	0.8	19	1	ABE95971	Human UGT1A1 varia	c1102	13.8	0.8	20	1	ABE31379	Candida albicans G
1039	13.8	0.8	19	1	ABE95971	Human UGT1A1 varia	c1103	13.8	0.8	20	1	ABE31379	Candida albicans G
1040	13.8	0.8	19	1	ABE95971	Human MDRI variant	1104	13.8	0.8	20	1	ABE96039	Mouse adipose prot
1041	13.8	0.8	19	1	ABE95971	Human MDRI variant	1105	13.8	0.8	20	1	ABE96039	Mouse syndecan-1 r
1042	13.8	0.8	19	1	ABE95971	Human MDRI variant	c1106	13.8	0.8	20	1	ABE96039	Human cytohesin-1
1043	13.8	0.8	19	1	ABE95971	Hamster high mobil	c1107	13.8	0.8	20	1	ABE96039	Capture oligonucle
1044	13.8	0.8	19	1	ABE95971	Stearoyl-CoA desat	c1108	13.8	0.8	20	1	ABE96039	Capture oligonucle
1045	13.8	0.8	19	1	ABE95971	HPV-16 control pri	c1109	13.8	0.8	20	1	ABE96039	Rat G protein-coup
1046	13.8	0.8	19	1	ABE95971	HPV-16 primer dnt	c1110	13.8	0.8	20	1	ABE96039	Human oligonucleot
1047	13.8	0.8	19	1	ABE95971	HPV-6 probe. Synt	c1111	13.8	0.8	20	1	ABE96039	Human oligonucleot
1048	13.8	0.8	19	1	ABE95971	Human papilloma vi	c1112	13.8	0.8	20	1	ABE96039	Human oligonucleot
1049	13.8	0.8	19	1	ABE95971	PCR primer PV3(5')	c1113	13.8	0.8	20	1	ABE96039	Human oligonucleot
1050	13.8	0.8	19	1	ABE95971	HPV16/pT713 primer	c1114	13.8	0.8	20	1	ABE96039	Human oligonucleot
1051	13.8	0.8	19	1	ABE95971	Peptide transport	c1115	13.8	0.8	20	1	ABE96039	Human oligonucleot
1052	13.8	0.8	19	1	ABE95971	Primer for amplif	c1116	13.8	0.8	20	1	ABE96039	Human oligonucleot
1053	13.8	0.8	19	1	ABE95971	Mouse Huntington's	c1117	13.8	0.8	20	1	ABE96039	Human oligonucleot
1054	13.8	0.8	19	1	ABE95971	Primer SHR-16 for	c1118	13.8	0.8	20	1	ABE96039	Human oligonucleot
1055	13.8	0.8	19	1	ABE95971	Variant #6 of univ	c1119	13.8	0.8	20	1	ABE96039	Human oligonucleot
							c1120	13.8	0.8	20	1	ABE96039	Human oligonucleot
							c1121	13.8	0.8	20	1	ABE96039	Human oligonucleot
							c1122	13.8	0.8	20	1	ABE96039	Human oligonucleot
							c1123	13.8	0.8	20	1	ABE96039	Human oligonucleot
							c1124	13.8	0.8	20	1	ABE96039	Human oligonucleot
							c1125	13.8	0.8	20	1	ABE96039	Human oligonucleot
							c1126	13.8	0.8	20	1	ABE96039	Human oligonucleot
							c1127	13.8	0.8	20	1	ABE96039	Human oligonucleot
							c1128	13.8	0.8	20	1	ABE96039	Human oligonucleot

1129	13.8	0.8	20	1	ADB93096	Human retinal pigm	1202	13.6	0.8	20	1	AAQ91248	BAA5 receptor PCR
1130	13.8	0.8	20	1	ADC65775	Human TGF-beta rec	ci203	13.6	0.8	20	1	AAQ01753	Peptide Nucleic ac
1131	13.8	0.8	20	1	ADC65775	Tannin biosynthesi	ci204	13.6	0.8	20	1	AAQ99937	P16-specific mouse
1132	13.8	0.8	20	1	ADC43046	Yeast CYP52A5A/B g	ci205	13.6	0.8	20	1	AAQ81115	Peptide nucleic ac
1133	13.8	0.8	20	1	ADC45616	Yeast CYP52A5A/B g	ci206	13.6	0.8	20	1	AAQ81119	Peptide nucleic ac
1134	13.8	0.8	20	1	ADC36600	Human CD81/TAPA-1	ci207	13.6	0.8	20	1	AAQ80945	PCR primer to gene
1135	13.8	0.8	20	1	ADC84236	Human papillomavir	ci208	13.6	0.8	20	1	AAQ00729	Multiple tumour su
1136	13.8	0.8	20	1	ADC84236	Human papillomavir	ci209	13.6	0.8	20	1	AAQ88741	Human ICAM modifi
1137	13.8	0.8	20	1	ADD69057	Angiogenesis inhib	ci210	13.6	0.8	20	1	AAQ41336	Human Fas ligand p
1138	13.8	0.8	20	1	ADD42212	Human infertility	ci211	13.6	0.8	20	1	AAQ99517	Human Fas ligand p
1139	13.8	0.8	20	1	ADZ28941	Reverse Ag2597 RT-	ci212	13.6	0.8	20	1	AAQ99516	Antisense oligonuc
1140	13.8	0.8	20	1	ADZ55127	C. tropicalis CYP5	ci213	13.6	0.8	20	1	AAQ44449	ICAM antisense com
1141	13.8	0.8	20	1	ADZ64291	HPV typing probe	ci214	13.6	0.8	20	1	AAQ44250	ICAM antisense in
1142	13.8	0.8	21	1	AAQ03910	HCV primer P6. Sy	ci215	13.6	0.8	20	1	AAQ33922	Primer for Min nuc
1143	13.8	0.8	21	1	AAQ27035	Primer for hepatit	ci216	13.6	0.8	20	1	AAQ15587	Antisense oligonuc
1144	13.8	0.8	21	1	AAQ05593	L1 consensus prime	ci217	13.6	0.8	20	1	AAQ30227	Phosphomonoester
1145	13.8	0.8	21	1	AAQ56381	Glucose oxidase se	ci218	13.6	0.8	20	1	AAQ24204	Human c-rai kinase
1146	13.8	0.8	21	1	AAQ56141	Plasmid YEpL/GOD-	ci219	13.6	0.8	20	1	AAQ27491	Human potassium ch
1147	13.8	0.8	21	1	AAQ57082	Human papilloma vi	ci220	13.6	0.8	20	1	AAQ18177	Complementary huma
1148	13.8	0.8	21	1	AAQ10818	Family 2 bFGF DNA	ci221	13.6	0.8	20	1	AAQ48972	P16 promoter speci
1149	13.8	0.8	21	1	AAQ00342	Chemokine receptor	ci222	13.6	0.8	20	1	AAQ72304	Human or Simian im
1150	13.8	0.8	21	1	AAQ35284	HPV typing probe M	ci223	13.6	0.8	20	1	AAQ98014	Primer #35 for cys
1151	13.8	0.8	21	1	AAQ44762	Human papillomavir	ci224	13.6	0.8	20	1	AAQ47409	Forward PCR primer
1152	13.8	0.8	21	1	AAQ78006	Human papillomavir	ci225	13.6	0.8	20	1	AAQ94038	Nucleotide sequenc
1153	13.8	0.8	21	1	AAQ27016	Homo sapiens gp-Fy	ci226	13.6	0.8	20	1	AAQ53844	Unmethylated CpG d
1154	13.8	0.8	21	1	AAQ17380	Probe M12 for huma	ci227	13.6	0.8	20	1	AAQ47686	Primer #2 for huma
1155	13.8	0.8	21	1	AAQ38524	PCR primer for pro	ci228	13.6	0.8	20	1	AAQ60732	Human c-fos protei
1156	13.8	0.8	21	1	AAQ40603	Human TSC gene exo	ci229	13.6	0.8	20	1	AAQ69958	Human MMS1 and MTS
1157	13.8	0.8	21	1	AAQ25918	Human polymorphic	ci230	13.6	0.8	20	1	AAQ11263	Primer 19 gene specifi
1158	13.8	0.8	21	1	AAQ30746	Human prostate spe	ci231	13.6	0.8	20	1	AAQ18169	Primer 18 gene specifi
1159	13.8	0.8	21	1	AAQ78886	Human plasminogen	ci232	13.6	0.8	20	1	AAQ18167	Primer 17 gene specifi
1160	13.8	0.8	21	1	AAQ69272	Human ABC1 gene ex	ci233	13.6	0.8	20	1	AAQ220188	Pregnancy associat
1161	13.8	0.8	21	1	AAQ60648	PCR primer used to	ci234	13.6	0.8	20	1	AAQ11521	Human c-raf kinase
1162	13.8	0.8	21	1	AAQ60652	PCR primer used to	ci235	13.6	0.8	20	1	AAQ207001	Human GABA B recep
1163	13.8	0.8	21	1	AAQ27136	Human biallelic ma	ci236	13.6	0.8	20	1	AAQ58122	Human iPKF-2 antis
1164	13.8	0.8	21	1	AAQ76024	Human gene single	ci237	13.6	0.8	20	1	AAQ58144	Human iPKF-2 antis
1165	13.8	0.8	21	1	AAQ95402	Human gene single	ci238	13.6	0.8	20	1	AAQ74243	Human iPKF-2 antis
1166	13.8	0.8	21	1	AAQ95950	Human gene single	ci239	13.6	0.8	20	1	AAQ74243	CPG-N motif O-ODN
1167	13.8	0.8	21	1	AAQ97421	Human gene single	ci240	13.6	0.8	20	1	AAQ74294	ICAM-1 antisense o
1168	13.8	0.8	21	1	AAQ96964	Human gene single	ci241	13.6	0.8	20	1	AAQ70608	PCR primer used to
1169	13.8	0.8	21	1	AAQ96582	Human gene single	ci242	13.6	0.8	20	1	AAQ202575	PCR primer used to
1170	13.8	0.8	21	1	AAQ93032	Partial exon 7 cor	ci243	13.6	0.8	20	1	AAQ201495	PCR primer used to
1171	13.8	0.8	21	1	AAQ40230	SNP specific lower	ci244	13.6	0.8	20	1	AAQ205818	PCR primer used to
1172	13.8	0.8	21	1	AAQ70928	bFGF DNA ligand #6	ci245	13.6	0.8	20	1	AAQ20583	PCR primer used to
1173	13.8	0.8	21	1	AAQ55160	Probe used to iden	ci246	13.6	0.8	20	1	AAQ00531	Antisense oligonuc
1174	13.8	0.8	21	1	AAQ89038	Human polymorphic	ci247	13.6	0.8	20	1	AAQ21345	Primer #2 for ampl
1175	13.8	0.8	21	1	ABQ01349	YMDP oligonucleoti	ci248	13.6	0.8	20	1	AAQ10728	Forward PCR primer
1176	13.8	0.8	21	1	ABQ01320	DNA probe for huma	ci249	13.6	0.8	20	1	AAQ56166	Human alpha-7 nico
1177	13.8	0.8	21	1	ABK65477	Human single nucle	ci250	13.6	0.8	20	1	AAQ09078	Tumour necrosis fa
1178	13.8	0.8	21	1	ABK60808	Human polymorphism	ci251	13.6	0.8	20	1	AAQ95935	PCR primer used to
1179	13.8	0.8	21	1	ABK60583	Human polymorphism	ci252	13.6	0.8	20	1	AAQ92771	PCR primer used to
1180	13.8	0.8	21	1	ABK60582	Human polymorphism	ci253	13.6	0.8	20	1	AAQ94323	PCR primer used to
1181	13.8	0.8	21	1	AAQ99452	Anti-human AILIM m	ci254	13.6	0.8	20	1	AAQ94068	PCR primer used to
1182	13.8	0.8	21	1	AAQ45724	Mycobacterium sp.	ci255	13.6	0.8	20	1	AAQ96741	PCR primer used to
1183	13.8	0.8	21	1	ABQ06423	Cyclin 14-3-3 sign	ci256	13.6	0.8	20	1	AAQ96621	PCR primer used to
1184	13.8	0.8	21	1	ABQ97470	Human diazepam bin	ci257	13.6	0.8	20	1	AAQ95259	PCR primer used to
1185	13.8	0.8	21	1	ABK53783	DMS:acceptor oxido	ci258	13.6	0.8	20	1	AAQ08858	3' RAE nested pri
1186	13.8	0.8	21	1	ABK94336	Endothelin convert	ci259	13.6	0.8	20	1	AAQ95656	Mouse P16 gene pri
1187	13.8	0.8	21	1	ABK94335	Endothelin convert	ci260	13.6	0.8	20	1	AAQ57446	Phosphorothioate o
1188	13.8	0.8	21	1	ABQ01134	Probe DBM080P, id	ci261	13.6	0.8	20	1	AAQ59793	Human PPARbeta gen
1189	13.8	0.8	21	1	ABQ01161	Probe DBM080P, id	ci262	13.6	0.8	20	1	AAQ59793	Primer for p38 nuc
1190	13.8	0.8	21	1	AAQ53951	Human papillomavir	ci263	13.6	0.8	20	1	AAQ48795	PCR primer for mou
1191	13.8	0.8	21	1	ADC51528	Potential matrix m	ci264	13.6	0.8	20	1	AAQ39994	PCR primer for hum
1192	13.8	0.8	21	1	ADC72204	Human stearyl coen	ci265	13.6	0.8	20	1	AAQ48638	Plasmodium DBL fam
1193	13.6	0.8	15	1	AAQ141783	Human MC2R gene AS	ci266	13.6	0.8	20	1	AAQ39378	ICAM-1 antisense i
1194	13.6	0.8	20	1	AAQ06909	MMV4B nucleotide c	ci267	13.6	0.8	20	1	AAQ39378	Mouse P16 PCR prim
1195	13.6	0.8	20	1	AAQ13687	N-ras gene codon 1	ci268	13.6	0.8	20	1	AAQ61834	Antisense oligonuc
1196	13.6	0.8	20	1	AAQ22643	Antisense oligonuc	ci269	13.6	0.8	20	1	AAQ77261	Human biallelic ma
1197	13.6	0.8	20	1	AAQ66488	K-ras codon 12 WTO	ci270	13.6	0.8	20	1	AAQ14488	Primer #13 in inve
1198	13.6	0.8	20	1	AAQ44522	Antisense oligonuc	ci271	13.6	0.8	20	1	AAQ09667	Human SHP-1 antise
1199	13.6	0.8	20	1	AAQ57992	Sequence of PCR pr	ci272	13.6	0.8	20	1	AAQ63936	PCR primer for mur
1200	13.6	0.8	20	1	AAQ71023	PCR primer for the	ci273	13.6	0.8	20	1	AAQ49337	ICAM-1 targeted p
1201	13.6	0.8	20	1	AAQ71501	Probe for identify	ci274	13.6	0.8	20	1	AAQ44889	Human K-ras PCR pr

c1275	13.6	0.8	20	1	AAZ89211	Human glyceraldehy	1348	13.6	0.8	20	1	ABA99824	Murine capn12 exon
c1276	13.6	0.8	20	1	AAA11188	Mouse multiple tum	c1349	13.6	0.8	20	1	ABN97923	GAPDH amplificatio
c1277	13.6	0.8	20	1	AAZ48909	Human ICAM-1 antis	c1350	13.6	0.8	20	1	ABK43252	Human HKG1 exon 9
c1278	13.6	0.8	20	1	AAC68206	Gene typing PCR pr	c1351	13.6	0.8	20	1	ABN80949	Mouse caspase 7 ph
c1279	13.6	0.8	20	1	AAC66586	Gene typing PCR pr	c1352	13.6	0.8	20	1	ABN80937	Mouse caspase 7 ph
c1280	13.6	0.8	20	1	AAA94747	Oligonucleotide #1	c1353	13.6	0.8	20	1	ABD39347	Human Von Willebra
c1281	13.6	0.8	20	1	AAA73499	Human c-raf kinase	c1354	13.6	0.8	20	1	ABQ74705	MAC2-BP gene sense
c1282	13.6	0.8	20	1	AAC60947	Interleukin 1 rece	c1355	13.6	0.8	20	1	ABK71229	Mouse HYPLIP1 locu
c1283	13.6	0.8	20	1	AAC63137	Cell cycle regulat	c1356	13.6	0.8	20	1	ABK71229	ICAM antisense oli
c1284	13.6	0.8	20	1	AAC79550	Murine p38beta ant	c1357	13.6	0.8	20	1	AAU44724	Human c-raf kinase
c1285	13.6	0.8	20	1	AAAF76673	B. brevis NRPS gen	c1358	13.6	0.8	20	1	ABQ78911	S. roseosporus dap
c1286	13.6	0.8	20	1	AAAF76673	Bone resorption mo	c1359	13.6	0.8	20	1	ABQ78911	Human NOV-associat
c1287	13.6	0.8	20	1	AAU44761	Human glycogen syn	c1360	13.6	0.8	20	1	AAU44761	Mouse AGP-3 PCR pr
c1288	13.6	0.8	20	1	ABA44587	Oligonucleotide #7	c1361	13.6	0.8	20	1	AAU44587	Human C/EBP beta p
c1289	13.6	0.8	20	1	AAC61175	Human bcl-2 phosph	c1362	13.6	0.8	20	1	ABK49114	Human KDR/Flk-1 mu
c1290	13.6	0.8	20	1	AAU44587	Primer #16. Homo	c1363	13.6	0.8	20	1	ABK49114	Capture oligonucle
c1291	13.6	0.8	20	1	AAU44587	Human cot oncogene	c1364	13.6	0.8	20	1	AAU44587	Human peptide tran
c1292	13.6	0.8	20	1	AAU44587	Human PARP-3 antis	c1365	13.6	0.8	20	1	ABK67749	Mouse transglutami
c1293	13.6	0.8	20	1	AAU44587	Human PARP-2 antis	c1366	13.6	0.8	20	1	ABK67749	Arabidopsis AINTEG
c1294	13.6	0.8	20	1	AAU44587	Human hnrNP A1 pho	c1367	13.6	0.8	20	1	ABT08433	Human Mac2-BP prom
c1295	13.6	0.8	20	1	AAU44587	Anti-ICAM-1 oligon	c1368	13.6	0.8	20	1	ABT08433	Recombinant blood
c1296	13.6	0.8	20	1	AAU44587	Mouse sirp3 gene s	c1369	13.6	0.8	20	1	ABT08433	BAGE marker gene s
c1297	13.6	0.8	20	1	AAU44587	Human sFRP4 gene s	c1370	13.6	0.8	20	1	ABT08433	Human bifunctional
c1298	13.6	0.8	20	1	AAU44587	PCR primer RP.2(re	c1371	13.6	0.8	20	1	ABT08433	Human oligonucleot
c1299	13.6	0.8	20	1	AAU44587	FITC-labeled ICAM	c1372	13.6	0.8	20	1	ABT08433	Human oligonucleot
c1300	13.6	0.8	20	1	AAU44587	PCR primer used to	c1373	13.6	0.8	20	1	ABT08433	Human oligonucleot
c1301	13.6	0.8	20	1	AAU44587	Immunostimulatory	c1374	13.6	0.8	20	1	ABT08433	Human oligonucleot
c1302	13.6	0.8	20	1	AAU44587	p38 gene PCR prime	c1375	13.6	0.8	20	1	ABT08433	Human oligonucleot
c1303	13.6	0.8	20	1	AAU44587	Human antileukopro	c1376	13.6	0.8	20	1	ABT08433	Human oligonucleot
c1304	13.6	0.8	20	1	AAU44587	PCR primer for nuc	c1377	13.6	0.8	20	1	ABT08433	Human oligonucleot
c1305	13.6	0.8	20	1	AAU44587	Mouse p16beta cDNA	c1378	13.6	0.8	20	1	ABT08433	Human oligonucleot
c1306	13.6	0.8	20	1	AAU44587	Human fascin assoc	c1379	13.6	0.8	20	1	ABT08433	Human oligonucleot
c1307	13.6	0.8	20	1	AAU44587	Primer for amplifi	c1380	13.6	0.8	20	1	ABT08433	Human oligonucleot
c1308	13.6	0.8	20	1	AAU44587	Primer used to amp	c1381	13.6	0.8	20	1	ABT08433	Human oligonucleot
c1309	13.6	0.8	20	1	AAU44587	Probe used to dete	c1382	13.6	0.8	20	1	ABT08433	ICAM-1 gene target
c1310	13.6	0.8	20	1	AAU44587	Human iPFK-2 DNA s	c1383	13.6	0.8	20	1	ABT08433	Human HSL chimeric
c1311	13.6	0.8	20	1	AAU44587	Human iPFK-2 DNA s	c1384	13.6	0.8	20	1	ABT08433	ICAM-1 inhibitory
c1312	13.6	0.8	20	1	AAU44587	Primer #18. Homo	c1385	13.6	0.8	20	1	ABT08433	Human alipoprotein
c1313	13.6	0.8	20	1	AAU44587	Primer used to amp	c1386	13.6	0.8	20	1	ABT08433	Oxidative stress d
c1314	13.6	0.8	20	1	AAU44587	Anti-ICAM oligonuc	c1387	13.6	0.8	20	1	ABT08433	Human interleukin
c1315	13.6	0.8	20	1	AAU44587	DNA 20-mer ASO (an	c1388	13.6	0.8	20	1	ABT08433	Toxicologically re
c1316	13.6	0.8	20	1	AAU44587	Human intracellular	c1389	13.6	0.8	20	1	ABT08433	Human PRL-3 forwar
c1317	13.6	0.8	20	1	AAU44587	Human COL9A2 PCR p	c1390	13.6	0.8	20	1	ABT08433	Antisense oligonuc
c1318	13.6	0.8	20	1	AAU44587	Intracellular-adhe	c1391	13.6	0.8	20	1	ABT08433	Right primer DBM00
c1319	13.6	0.8	20	1	AAU44587	ICAM-1 targeted an	c1392	13.6	0.8	20	1	ABT08433	ICAM-1 inhibitory
c1320	13.6	0.8	20	1	AAU44587	HHV4 nuclear prot	c1393	13.6	0.8	20	1	ABT08433	Vpr-driven constru
c1321	13.6	0.8	20	1	AAU44587	Collagenase 1 gene	c1394	13.6	0.8	20	1	ABT08433	Antisense oligonuc
c1322	13.6	0.8	20	1	AAU44587	ARF/HK33 protein r	c1395	13.6	0.8	20	1	ABT08433	Nucleotide sequenc
c1323	13.6	0.8	20	1	AAU44587	Mouse FLIP-c chime	c1396	13.6	0.8	20	1	ABT08433	p38 gene PCR prime
c1324	13.6	0.8	20	1	AAU44587	Human leukocyte an	c1397	13.6	0.8	20	1	ABT08433	EGFR mRNA inhibiti
c1325	13.6	0.8	20	1	AAU44587	Human SAC1 gene-sp	c1398	13.6	0.8	20	1	ABT08433	Murine p38-alpha M
c1326	13.6	0.8	20	1	AAU44587	Maturation/activat	c1399	13.6	0.8	20	1	ABT08433	Human p70 S6 kinase
c1327	13.6	0.8	20	1	AAU44587	Human glioma-assoc	c1400	13.6	0.8	20	1	ABT08433	Neuroblastoma-rela
c1328	13.6	0.8	20	1	AAU44587	Arginogenesis inhib	c1401	13.6	0.8	20	1	ABT08433	FLT-4 primer #2.
c1329	13.6	0.8	20	1	AAU44587	Immunostimulatory	c1402	13.6	0.8	20	1	ABT08433	Human CREB phospho
c1330	13.6	0.8	20	1	AAU44587	ICAM-1 targeted an	c1403	13.6	0.8	20	1	ABT08433	Neuroblastoma-rela
c1331	13.6	0.8	20	1	AAU44587	Mouse HYPLIP1 locu	c1404	13.6	0.8	20	1	ABT08433	Human BAX chimeric
c1332	13.6	0.8	20	1	AAU44587	Human PTP1B antise	c1405	13.6	0.8	20	1	ABT08433	Mouse BAX chimeric
c1333	13.6	0.8	20	1	AAU44587	Human FasL chimeri	c1406	13.6	0.8	20	1	ABT08433	MHC class II trans
c1334	13.6	0.8	20	1	AAU44587	iPFK-2-specific ol	c1407	13.6	0.8	20	1	ABT08433	Human ETBR-LP-2 an
c1335	13.6	0.8	20	1	AAU44587	iPFK-2-specific ol	c1408	13.6	0.8	20	1	ABT08433	Human ETBR-LP-2 an
c1336	13.6	0.8	20	1	AAU44587	Human chromosome 1	c1409	13.6	0.8	20	1	ABT08433	Immunostimulatory
c1337	13.6	0.8	20	1	AAU44587	Human chromosome 1	c1410	13.6	0.8	20	1	ABT08433	Mouse HYPLIP1 locu
c1338	13.6	0.8	20	1	AAU44587	Human helicase-moi	c1411	13.6	0.8	20	1	ABT08433	Murine embryonic c
c1339	13.6	0.8	20	1	AAU44587	SHH patched recept	c1412	13.6	0.8	20	1	ABT08433	Sense PCR primer u
c1340	13.6	0.8	20	1	AAU44587	Human ICAM-1 antis	c1413	13.6	0.8	20	1	ABT08433	Mouse HYPLIP1 PCR
c1341	13.6	0.8	20	1	AAU44587	BIF2AK3 gene sequ	c1414	13.6	0.8	20	1	ABT08433	Immunostimulatory
c1342	13.6	0.8	20	1	AAU44587	Nucleic acid detec	c1415	13.6	0.8	20	1	ABT08433	Clone specific PCR
c1343	13.6	0.8	20	1	AAU44587	Nucleic acid detec	c1416	13.6	0.8	20	1	ABT08433	Mouse TGF-beta rec
c1344	13.6	0.8	20	1	AAU44587	Nucleic acid detec	c1417	13.6	0.8	20	1	ABT08433	Human NOVX polypep
c1345	13.6	0.8	20	1	AAU44587	Nucleic acid detec	c1418	13.6	0.8	20	1	ABT08433	Human ICAM-1 targ
c1346	13.6	0.8	20	1	AAU44587	Human syntaxin 4 i	c1419	13.6	0.8	20	1	ABT08433	Human ICAM-1 antis
c1347	13.6	0.8	20	1	AAU44587	Candida albicans G	c1420	13.6	0.8	20	1	ABT08433	AS-IPFK-2 (A) anti

c1421	13.6	0.8	20	1	AAD59445	S-1BFX-2 (A) sense	c1494	13.4	0.8	17	1	ACD55495	HBV amberyze subs
1422	13.6	0.8	20	1	ADD22540	Flatfish rhabdovir	c1495	13.4	0.8	17	1	ACD55494	HBV amberyze subs
1423	13.6	0.8	20	1	ADD68463	SNP typing-related	c1496	13.4	0.8	17	1	ACD58065	HCV DNazyme substr
1424	13.6	0.8	21	1	AAZ26102	Human polymorphic	1497	13.4	0.8	17	1	ACD64603	HCV minus strand D
1425	13.6	0.8	21	1	AAQ97537	Human gene single	1498	13.4	0.8	17	1	ACD51807	HBV inozyme substr
1426	13.4	0.8	15	1	AAQ24934	Synthetic primer (c1499	13.4	0.8	17	1	ACD55493	HBV amberyze subs
1427	13.4	0.8	15	1	AAAT55034	Human rela hamerh	1500	13.4	0.8	17	1	ACD54462	HBV DNazyme substr
c1428	13.4	0.8	15	1	AAAX5669	Human fit-1 and KD	c1501	13.4	0.8	17	1	ACC64765	Murine oligonucleo
c1429	13.4	0.8	15	1	AAV42654	DNA sequence of th	1502	13.4	0.8	17	1	ACC66050	Murine oligonucleo
c1430	13.4	0.8	15	1	AAV42817	Probe used to iden	c1503	13.4	0.8	17	1	ACC68168	Human oligonucleot
c1431	13.4	0.8	15	1	AAAX11178	Tag sequence of a	c1504	13.4	0.8	17	1	ABX16354	Human checkpoint g
1432	13.4	0.8	15	1	AAA92356	Original DNA templ	1505	13.4	0.8	17	1	ADC37957	Human AMLP1a scan
c1433	13.4	0.8	15	1	AAAT29402	Acid/base ortholog	1506	13.4	0.8	17	1	ADC37955	Human AMLP1a scan
c1434	13.4	0.8	15	1	AAFS0411	IGF-1 oligonucleot	1507	13.4	0.8	17	1	ADC37956	Human AMLP1a scan
c1435	13.4	0.8	15	1	AAAF6589	IGFBP3 oligonucleot	1508	13.4	0.8	18	1	ADT50714	Rabbit CEMP hairpi
c1436	13.4	0.8	15	1	AAFS0410	IGF-1 oligonucleot	c1509	13.4	0.8	18	1	AAV12786	Patient-specific C
c1437	13.4	0.8	15	1	AAAF50702	IGF-1 oligonucleot	c1510	13.4	0.8	18	1	AAV73903	Human HLA-A2 A*02
1438	13.4	0.8	15	1	AAZ234171	HIV-1 reverse tran	c1511	13.4	0.8	18	1	AAV86679	Human chromosome 1
c1439	13.4	0.8	15	1	ABK32132	Human colon cancer	c1512	13.4	0.8	18	1	AAZ31848	Human G-alpha-13 a
1440	13.4	0.8	15	1	ABK32677	Ineffective anti-H	1513	13.4	0.8	18	1	AAZ79315	Primer F72 for iso
c1441	13.4	0.8	17	1	AAAT11976	CMV antisense olig	1514	13.4	0.8	18	1	AAZ74421	Human biallelic ma
c1442	13.4	0.8	17	1	AAAT01678	Peptide nucleic ac	c1515	13.4	0.8	18	1	AAH40049	SNP specific upper
c1443	13.4	0.8	17	1	AAAG69179	Human fit1 VEGF re	c1516	13.4	0.8	18	1	ABK52758	Nuclease resistant
1444	13.4	0.8	17	1	AAAX71471	Human KDR VEGF rec	c1517	13.4	0.8	18	1	ABL44832	Human chromosome 1
1445	13.4	0.8	17	1	AAV97521	Human EGF-R target	1518	13.4	0.8	18	1	ABJ94603	Rat VRI antisense
1446	13.4	0.8	17	1	AAV69694	Human GDNF gene ex	1519	13.4	0.8	18	1	AAD44128	PCR primer #3 desi
c1447	13.4	0.8	17	1	AAAX17893	Anti-CMV oligonuel	c1520	13.4	0.8	18	1	ABX03808	DNA encoding secre
c1448	13.4	0.8	17	1	AAA21066	Integrin alpha 6 s	1521	13.4	0.8	18	1	AAJ52481	Lolium perenne lpp
c1449	13.4	0.8	17	1	AAA23257	Integrin subunit b	1522	13.4	0.8	18	1	ABV77210	PCR primer used to
1450	13.4	0.8	17	1	AAA20471	Integrin alpha 6 s	1523	13.4	0.8	19	1	AAQ31185	Alpha 6A integrin
1451	13.4	0.8	17	1	AAA24802	Oestrogen receptor	1524	13.4	0.8	19	1	AAV30804	Human proinhibin g
1452	13.4	0.8	17	1	AAAF06373	Hammerhead ribozym	1525	13.4	0.8	19	1	AAZ31877	S. aureus polypept
c1453	13.4	0.8	17	1	ABK03332	Human CD20 Inozyme	1526	13.4	0.8	19	1	AAZ20455	PCR primer Bmag5Re
c1454	13.4	0.8	17	1	ABK03331	Human cell cycle c	1527	13.4	0.8	19	1	AAZ59837	PCR primer used to
c1455	13.4	0.8	17	1	AAJ03853	Human oocyte cyclin	1528	13.4	0.8	19	1	AAZ83293	cdks ribozyme bind
c1456	13.4	0.8	17	1	AAV95074	Human oocyte cyclin	c1529	13.4	0.8	19	1	AAZ83159	Targeted chromosom
c1457	13.4	0.8	17	1	AAV95074	Human GMPLP-1 17-m	c1530	13.4	0.8	19	1	AAH31519	SNP specific upper
c1458	13.4	0.8	17	1	AAV95074	Human GMPLP-1 17-m	1531	13.4	0.8	19	1	AAH38455	Cell-cycle depende
c1459	13.4	0.8	17	1	AAV95074	Human GMPLP-1 17-m	c1532	13.4	0.8	19	1	ABK24631	Hygromycin-B codin
c1460	13.4	0.8	17	1	AAV95074	Human GMPLP-1 17-m	c1533	13.4	0.8	19	1	AAZ50058	Murine alpha-beta T
c1461	13.4	0.8	17	1	AAV95074	Human GMPLP-1 17-m	c1534	13.4	0.8	19	1	ABQ76903	hdm2 protein-assoc
c1462	13.4	0.8	17	1	AAV95074	Human GMPLP-1 17-m	c1535	13.4	0.8	19	1	ABQ76903	Novel human NOVX g
c1463	13.4	0.8	17	1	AAV95074	Human KROMia portl	c1536	13.4	0.8	19	1	ADZ39346	Human NOVX forward
c1464	13.4	0.8	17	1	AAV95074	Human KROMia portl	c1537	13.4	0.8	19	1	ADZ39346	Novel human NOVX g
c1465	13.4	0.8	17	1	AAV95074	Human HTPL scannin	1538	13.4	0.8	19	1	ADZ39346	Mitogen activated
c1466	13.4	0.8	17	1	AAV95074	Human HTPL scannin	1539	13.4	0.8	19	1	ADZ39346	Mitogen activated
1467	13.4	0.8	17	1	ABK19255	Human ERG Amberyze	1540	13.4	0.8	20	1	AAQ15414	Probe to mutant se
1468	13.4	0.8	17	1	ABK19255	Human PAPP-Ea asso	1541	13.4	0.8	20	1	AAQ15414	Probe to mutant se
1469	13.4	0.8	17	1	ABV90264	Human POSHL1 scan	1542	13.4	0.8	20	1	AAQ15414	Glucocerebrosidase
c1470	13.4	0.8	17	1	ABV91092	Human POSHL1 scan	1543	13.4	0.8	20	1	AAQ15414	pool amplification
c1471	13.4	0.8	17	1	ABV91093	Human POSHL1 scan	c1544	13.4	0.8	20	1	AAQ15414	c-RAP protooncogen
1472	13.4	0.8	17	1	ABV90265	Human POSHL1 scan	c1545	13.4	0.8	20	1	AAV01150	Homeobox 7 PCR pri
1473	13.4	0.8	17	1	ABV90266	Human POSHL1 scan	c1546	13.4	0.8	20	1	AAV01150	T-cell receptor be
c1474	13.4	0.8	17	1	ABV91091	Human POSHL1 scan	c1547	13.4	0.8	20	1	AAV01194	PCR primer 4 used
c1475	13.4	0.8	17	1	AAV91091	Human POSHL1 scan	1548	13.4	0.8	20	1	AAAT97944	Locl-specific prim
1476	13.4	0.8	17	1	AAV91091	Degenerate PCR pri	c1549	13.4	0.8	20	1	AAAT68376	Locl-specific prim
1477	13.4	0.8	17	1	ABK57291	Human CICAL gene e	1550	13.4	0.8	20	1	AAAT68376	Human biallelic po
1478	13.4	0.8	17	1	ABK56866	Human CICAL gene e	c1551	13.4	0.8	20	1	AAAT68376	Primer YA6. Synth
1479	13.4	0.8	17	1	ABK56439	Human CICAL gene e	c1552	13.4	0.8	20	1	AAV27081	Primer YSS. Synth
1480	13.4	0.8	17	1	ABK571129	Human CICAL gene e	1553	13.4	0.8	20	1	AAV27081	PCR primer 2 used
1481	13.4	0.8	17	1	ABK55967	Human CICAL gene e	c1554	13.4	0.8	20	1	AAV42487	PCR primer 1 used
1482	13.4	0.8	17	1	ACC54018	Human tumour suppr	1555	13.4	0.8	20	1	AAV05848	3' primer for huma
c1483	13.4	0.8	17	1	ACC53039	Human tumour suppr	1556	13.4	0.8	20	1	AAV05848	Primer ACE/184FB f
c1484	13.4	0.8	17	1	ABT35689	Tumour suppression	1557	13.4	0.8	20	1	AAV08608	CXCR4 gene inhibit
c1485	13.4	0.8	17	1	ACA06589	NFKB sub-unit modu	1558	13.4	0.8	20	1	AAZ31321	PCR primer used to
c1486	13.4	0.8	17	1	ACA07774	NFKB sub-unit modu	1559	13.4	0.8	20	1	AAZ50007	Rat high/low molec
1487	13.4	0.8	17	1	ACA08921	NFKB sub-unit modu	1560	13.4	0.8	20	1	AAZ31346	Rat T kininogen PC
c1488	13.4	0.8	17	1	ABZ65140	Human HER2 DNazyme	1561	13.4	0.8	20	1	AAZ31349	Deletion sequence
c1489	13.4	0.8	17	1	ABZ65147	Human H-Ras DNazym	c1562	13.4	0.8	20	1	AAZ33551	PCR primer used to
c1490	13.4	0.8	17	1	ABZ65006	Human H-Ras DNazym	1563	13.4	0.8	20	1	AAZ931254	PCR primer used to
1491	13.4	0.8	17	1	ABZ64791	Human HER2 DNazyme	c1564	13.4	0.8	20	1	AAZ96164	Mouse multidrug re
c1492	13.4	0.8	17	1	ABZ62005	Human H-Ras DNazym	1565	13.4	0.8	20	1	AAZ40720	Human biallelic ma
1493	13.4	0.8	17	1	ACD64604	HCV minus strand D	c1566	13.4	0.8	20	1	AAZ72882	

c1567	13.4	0.8	20	1	AAA79748	Hepatitis B virus	c1640	13.2	0.8	18	1	AA117896	Anti-CMV oligonucleotide
1568	13.4	0.8	20	1	AAA38236	Human angiotensin-	c1641	13.2	0.8	18	1	AAZ08650	D52-like transcript
1569	13.4	0.8	20	1	AAAC6236	Human ACE, AGI and	c1642	13.2	0.8	18	1	AAZ18148	STK 13 gene specific
c1570	13.4	0.8	20	1	AAA93391	Rat FGFR coding se	c1643	13.2	0.8	18	1	AAZ18144	STK 11 gene specific
1571	13.4	0.8	20	1	AAA66189	Dog genomic marker	c1644	13.2	0.8	18	1	AAZ18150	STK 10 gene specific
c1572	13.4	0.8	20	1	AAA66813	Dog genomic marker	c1645	13.2	0.8	18	1	AAZ18142	STK 14 gene specific
c1573	13.4	0.8	20	1	AAAF79540	Murine p38beta ant	c1646	13.2	0.8	18	1	AAZ18138	STK 8 gene specific
1574	13.4	0.8	20	1	AAAF55056	PCR primer used to	c1647	13.2	0.8	18	1	AAZ18146	STK 12 gene specific
c1575	13.4	0.8	20	1	AAAF75317	Mouse inducible NO	c1648	13.2	0.8	18	1	AAZ18140	STK 9 gene specific
1576	13.4	0.8	20	1	AAAF92776	Human hRNP A1 pho	c1649	13.2	0.8	18	1	AAZ22359	Phosphorothioate a
c1577	13.4	0.8	20	1	AAAF92806	Human hRNP A1 pho	c1650	13.2	0.8	18	1	AAZ22359	CRCA-1 coding sequ
1578	13.4	0.8	20	1	AAAF62218	PCR primer for fac	c1651	13.2	0.8	18	1	AAZ04875	Tenascin-C phospho
1579	13.4	0.8	20	1	AAAD04441	Forward PCR primer	c1652	13.2	0.8	18	1	AAZ04875	Human EGR-1 DNA an
c1580	13.4	0.8	20	1	AAAH00813	Cryptosporidium pa	c1653	13.2	0.8	18	1	AAZ44153	TRAF3 antisense ol
c1581	13.4	0.8	20	1	AAH225573	PK-2 transgene det	c1654	13.2	0.8	18	1	AAZ44153	Human TNFR1 mRNA i
c1582	13.4	0.8	20	1	AAH24592	Human endometrium	c1655	13.2	0.8	18	1	AAZ48544	Coding sequence CO
c1583	13.4	0.8	20	1	AAAD11810	Salmonella typhimu	c1656	13.2	0.8	18	1	AAZ48544	Back primer #4 use
1584	13.4	0.8	20	1	AAAC83279	PCR primer used sp	c1657	13.2	0.8	18	1	AAZ09337	Human OP-1 mutagen
c1585	13.4	0.8	20	1	AAAH48612	Human fascin assoc	c1658	13.2	0.8	18	1	AAZ38551	Human OP-1 mutagen
1586	13.4	0.8	20	1	AAAC86079	Primer to detect C	c1659	13.2	0.8	18	1	AAZ38550	G-alpha-12 antisen
c1587	13.4	0.8	20	1	AAAC86072	Primer to detect T	c1660	13.2	0.8	18	1	AAZ09722	Cdc 2 kinase hamme
c1588	13.4	0.8	20	1	AAAC89125	Canine retroviral	c1661	13.2	0.8	18	1	AAZ09722	Cdc 2 kinase hamme
1589	13.4	0.8	20	1	AAAF91350	Human E2F transcri	c1662	13.2	0.8	18	1	AAZ09722	Erbb-2 oncogene B2
c1590	13.4	0.8	20	1	AAAF91350	Microorganism dete	c1663	13.2	0.8	18	1	AAZ09722	Human biallelic ma
1591	13.4	0.8	20	1	AAAH26635	Human MADH6 mRNA a	c1664	13.2	0.8	18	1	AAZ09722	Human biallelic ma
1592	13.4	0.8	20	1	AAAH26636	Human MADH6 mRNA a	c1665	13.2	0.8	18	1	AAZ09722	PCR primer #1 for
c1593	13.4	0.8	20	1	AAAH45259	PCR primer used to	c1666	13.2	0.8	18	1	AAZ09722	Human c-kit fragme
1594	13.4	0.8	20	1	AAAD41542	Cystatin M gene sp	c1667	13.2	0.8	18	1	AAZ09722	BMP mutant chimeri
1595	13.4	0.8	20	1	AAAD41116	Primer ON-Din1-F3	c1668	13.2	0.8	18	1	AAZ09722	BMP mutant chimeri
1596	13.4	0.8	20	1	AAH89213	Human Talin antise	c1669	13.2	0.8	18	1	AAZ09722	D53 gene PCR prime
1597	13.4	0.8	20	1	AAAL40334	Human caspase 6 an	c1670	13.2	0.8	18	1	AAZ09722	Nucleotide sequenc
c1598	13.4	0.8	20	1	AAAD40926	Human HDAL antisen	c1671	13.2	0.8	18	1	AAZ09722	Single nucleotide
1599	13.4	0.8	20	1	AAZ334413	Candida albicans G	c1672	13.2	0.8	18	1	AAZ09722	Single nucleotide
c1600	13.4	0.8	20	1	AAAL48224	Human IL-10 coding	c1673	13.2	0.8	18	1	AAZ09722	Nucleotide sequenc
c1601	13.4	0.8	20	1	AAI971781	Capture oligonucle	c1674	13.2	0.8	18	1	AAZ09722	C. glutamicum ATCC
c1602	13.4	0.8	20	1	AAAX49768	Human atopic derma	c1675	13.2	0.8	18	1	AAZ09722	Human Erbb-2 (E2C)
1603	13.4	0.8	20	1	AAK69328	Chimeric phospho	c1676	13.2	0.8	18	1	AAZ09722	Human Erbb-2 (E2C)
1604	13.4	0.8	20	1	AAAT03951	Human pol kappa 70	c1677	13.2	0.8	18	1	AAZ09722	PCR primer used fo
c1605	13.4	0.8	20	1	AAAD41680	Human IL-12 p35 su	c1678	13.2	0.8	18	1	AAZ09722	Multiple repeated
c1606	13.4	0.8	20	1	AAZ92732	Human oligonucleot	c1679	13.2	0.8	18	1	AAZ09722	Pseudomonas aerugi
1607	13.4	0.8	20	1	AAZ87042	Human oligonucleot	c1680	13.2	0.8	18	1	AAZ09722	Cdc 2 kinase hamme
c1608	13.4	0.8	20	1	AAZ876781	Human oligonucleot	c1681	13.2	0.8	18	1	AAZ09722	Cdc 2 kinase hamme
1609	13.4	0.8	20	1	AAZ90932	Human oligonucleot	c1682	13.2	0.8	18	1	AAZ09722	Zmax1 gene region
1610	13.4	0.8	20	1	AAZ92011	Human oligonucleot	c1683	13.2	0.8	18	1	AAZ09722	Beta-defensin PCR
1611	13.4	0.8	20	1	AAZ75745	Sorting nexin 3 ge	c1684	13.2	0.8	18	1	AAZ09722	Human chromosome 1
c1612	13.4	0.8	20	1	ADA26843	Human nuclear rece	c1685	13.2	0.8	18	1	AAZ09722	Human chromosome 1
1613	13.4	0.8	20	1	ACA97213	Vpr-driven constru	c1686	13.2	0.8	18	1	AAZ09722	TNFR1 expression m
c1614	13.4	0.8	20	1	AAZ34199	Mouse short hetero	c1687	13.2	0.8	18	1	AAZ09722	E2C recognition se
c1615	13.4	0.8	20	1	AAZ78139	Murine p38-alpha M	c1688	13.2	0.8	18	1	AAZ09722	Histamine N-methyl
1616	13.4	0.8	20	1	AAZ43349	Neuroblastoma-rela	c1689	13.2	0.8	18	1	AAZ09722	Murine alpha-T cel
c1617	13.4	0.8	20	1	AAZ95014	Human MAGE-C2 gene	c1690	13.2	0.8	18	1	AAZ09722	Human Zmax1 cDNA f
1618	13.4	0.8	20	1	AAZ52514	Arabidopsis thalia	c1691	13.2	0.8	18	1	AAZ09722	Bovine leukocyte a
1619	13.4	0.8	20	1	AAZ52514	Neuroblastoma-rela	c1692	13.2	0.8	18	1	AAZ09722	S. mutans 16S rRNA
c1620	13.4	0.8	20	1	AAZ23029	Human NEMO gene in	c1693	13.2	0.8	18	1	AAZ09722	Human Her-2 antise
c1621	13.4	0.8	20	1	AAZ99704	Cyclin D1 PCR prim	c1694	13.2	0.8	18	1	AAZ09722	PCR primer #2 for
c1622	13.4	0.8	20	1	AAZ47483	Microorganism seque	c1695	13.2	0.8	18	1	AAZ09722	Oligonucleotide ta
1623	13.4	0.8	20	1	AAZ13554	Human bi-direction	c1696	13.2	0.8	18	1	AAZ09722	UP5 universal 5' p
c1624	13.4	0.8	20	1	AAZ97855	Human tumour necro	c1697	13.2	0.8	18	1	AAZ09722	Antisense inhibiti
c1625	13.4	0.8	20	1	AAZ90005	Antisense oligonu	c1698	13.2	0.8	18	1	AAZ09722	Proto-oncogene c-e
1626	13.4	0.8	20	1	AAZ73020	O-glycan alpha2,8-	c1699	13.2	0.8	18	1	AAZ09722	Human HBM STS mark
c1627	13.2	0.8	18	1	AAZ26202	HLA-DR beta subty	c1700	13.2	0.8	18	1	AAZ09722	Guanylate kinase g
c1628	13.2	0.8	18	1	AAZ30876	Oligonucleotide co	c1701	13.2	0.8	18	1	AAZ09722	Sequence tagged si
c1629	13.2	0.8	18	1	AAZ052831	Cytomegalovirus ta	c1702	13.2	0.8	18	1	AAZ09722	Human alpha1-anti
c1630	13.2	0.8	18	1	AAZ07635	Ribonucleotide to	c1703	13.2	0.8	18	1	AAZ09722	Probe/primer TB-9
1631	13.2	0.8	18	1	AAZ07649	Antisense ribonuc	c1704	13.2	0.8	18	1	AAZ09722	Primer D5, to gene
c1632	13.2	0.8	18	1	AAZ076394	Polynucleotide to	c1705	13.2	0.8	18	1	AAZ09722	Chromosome 11 (loc
1633	13.2	0.8	18	1	AAZ07621	Antisense polynucl	c1706	13.2	0.8	18	1	AAZ09722	Foldback triplex f
c1634	13.2	0.8	18	1	AAZ11979	CMV antisense olig	c1707	13.2	0.8	18	1	AAZ09722	Cytochrome c oxida
c1635	13.2	0.8	18	1	AAZ01080	Peptide nucleic ac	c1708	13.2	0.8	18	1	AAZ09722	N. catarrhalis str
c1636	13.2	0.8	18	1	AAZ01080	Human p53 oncogene	c1709	13.2	0.8	18	1	AAZ09722	Wild-type B-cadher
c1637	13.2	0.8	18	1	AAZ02092	Human fit1 VEGF re	c1710	13.2	0.8	18	1	AAZ09722	PCR primer for bac
c1638	13.2	0.8	18	1	AAZ58789	Primer (set B) for	c1711	13.2	0.8	18	1	AAZ09722	PCR primer for S.
1639	13.2	0.8	18	1	AAZ33077	cdc2 kinase primer	c1712	13.2	0.8	18	1	AAZ09722	PCR primer bE5(+)

1713	13.2	0.8	19	1	AA18421	PCR primer bE5 (+)	1786	13.2	0.8	20	1	AA03255	Erwinia thaportici
1714	13.2	0.8	19	1	AA229215	Primer IFN6 used f	1787	13.2	0.8	20	1	AA08664	HSV antisense olig
1715	13.2	0.8	19	1	AA04957	Tenascin-C phospho	1788	13.2	0.8	20	1	AA082120	Chromosome 11 (loc
1716	13.2	0.8	19	1	AA04958	Tenascin-C phospho	1789	13.2	0.8	20	1	AA041351	Human gene signatu
1717	13.2	0.8	19	1	AA257250	Human mitochondria	1790	13.2	0.8	20	1	AA041156	Human gene signatu
1718	13.2	0.8	19	1	AA257251	Human mitochondria	1791	13.2	0.8	20	1	AA036065	Primer for subclon
1719	13.2	0.8	19	1	AA083633	cdk-we-hu ribozyme	1792	13.2	0.8	20	1	AA081837	N-ras mutant Aspl2
1720	13.2	0.8	19	1	AA082982	cdk6 ribozyme bind	1793	13.2	0.8	20	1	AA087113	Aspergillus niger
1721	13.2	0.8	19	1	AA083091	cdk7 ribozyme bind	1794	13.2	0.8	20	1	AA084204	PKC-eta antisense
1722	13.2	0.8	19	1	AA084344	Cyclin D2 ribozyme	1795	13.2	0.8	20	1	AA081864	SMN gene T-BD541
1723	13.2	0.8	19	1	AA082641	cdk2 ribozyme bind	1796	13.2	0.8	20	1	AA015136	Hypermutable targe
1724	13.2	0.8	19	1	AA082642	cdk2 ribozyme bind	1797	13.2	0.8	20	1	AA015136	Hypermutable targe
1725	13.2	0.8	19	1	AA086304	PCSA HH ribozyme b	1798	13.2	0.8	20	1	AA033635	Human Factor V gen
1726	13.2	0.8	19	1	AA083760	cdk-we-hu ribozyme	1799	13.2	0.8	20	1	AA033635	Human Factor V gen
1727	13.2	0.8	19	1	AA083198	cdk7 ribozyme bind	1800	13.2	0.8	20	1	AA033635	Human Factor V gen
1728	13.2	0.8	19	1	AA084464	Cyclin D3 ribozyme	1801	13.2	0.8	20	1	AA033635	Human Factor V gen
1729	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1802	13.2	0.8	20	1	AA033635	Human Factor V gen
1730	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1803	13.2	0.8	20	1	AA033635	Human Factor V gen
1731	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1804	13.2	0.8	20	1	AA033635	Human Factor V gen
1732	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1805	13.2	0.8	20	1	AA033635	Human Factor V gen
1733	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1806	13.2	0.8	20	1	AA033635	Human Factor V gen
1734	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1807	13.2	0.8	20	1	AA033635	Human Factor V gen
1735	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1808	13.2	0.8	20	1	AA033635	Human Factor V gen
1736	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1809	13.2	0.8	20	1	AA033635	Human Factor V gen
1737	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1810	13.2	0.8	20	1	AA033635	Human Factor V gen
1738	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1811	13.2	0.8	20	1	AA033635	Human Factor V gen
1739	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1812	13.2	0.8	20	1	AA033635	Human Factor V gen
1740	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1813	13.2	0.8	20	1	AA033635	Human Factor V gen
1741	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1814	13.2	0.8	20	1	AA033635	Human Factor V gen
1742	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1815	13.2	0.8	20	1	AA033635	Human Factor V gen
1743	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1816	13.2	0.8	20	1	AA033635	Human Factor V gen
1744	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1817	13.2	0.8	20	1	AA033635	Human Factor V gen
1745	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1818	13.2	0.8	20	1	AA033635	Human Factor V gen
1746	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1819	13.2	0.8	20	1	AA033635	Human Factor V gen
1747	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1820	13.2	0.8	20	1	AA033635	Human Factor V gen
1748	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1821	13.2	0.8	20	1	AA033635	Human Factor V gen
1749	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1822	13.2	0.8	20	1	AA033635	Human Factor V gen
1750	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1823	13.2	0.8	20	1	AA033635	Human Factor V gen
1751	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1824	13.2	0.8	20	1	AA033635	Human Factor V gen
1752	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1825	13.2	0.8	20	1	AA033635	Human Factor V gen
1753	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1826	13.2	0.8	20	1	AA033635	Human Factor V gen
1754	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1827	13.2	0.8	20	1	AA033635	Human Factor V gen
1755	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1828	13.2	0.8	20	1	AA033635	Human Factor V gen
1756	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1829	13.2	0.8	20	1	AA033635	Human Factor V gen
1757	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1830	13.2	0.8	20	1	AA033635	Human Factor V gen
1758	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1831	13.2	0.8	20	1	AA033635	Human Factor V gen
1759	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1832	13.2	0.8	20	1	AA033635	Human Factor V gen
1760	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1833	13.2	0.8	20	1	AA033635	Human Factor V gen
1761	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1834	13.2	0.8	20	1	AA033635	Human Factor V gen
1762	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1835	13.2	0.8	20	1	AA033635	Human Factor V gen
1763	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1836	13.2	0.8	20	1	AA033635	Human Factor V gen
1764	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1837	13.2	0.8	20	1	AA033635	Human Factor V gen
1765	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1838	13.2	0.8	20	1	AA033635	Human Factor V gen
1766	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1839	13.2	0.8	20	1	AA033635	Human Factor V gen
1767	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1840	13.2	0.8	20	1	AA033635	Human Factor V gen
1768	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1841	13.2	0.8	20	1	AA033635	Human Factor V gen
1769	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1842	13.2	0.8	20	1	AA033635	Human Factor V gen
1770	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1843	13.2	0.8	20	1	AA033635	Human Factor V gen
1771	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1844	13.2	0.8	20	1	AA033635	Human Factor V gen
1772	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1845	13.2	0.8	20	1	AA033635	Human Factor V gen
1773	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1846	13.2	0.8	20	1	AA033635	Human Factor V gen
1774	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1847	13.2	0.8	20	1	AA033635	Human Factor V gen
1775	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1848	13.2	0.8	20	1	AA033635	Human Factor V gen
1776	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1849	13.2	0.8	20	1	AA033635	Human Factor V gen
1777	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1850	13.2	0.8	20	1	AA033635	Human Factor V gen
1778	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1851	13.2	0.8	20	1	AA033635	Human Factor V gen
1779	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1852	13.2	0.8	20	1	AA033635	Human Factor V gen
1780	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1853	13.2	0.8	20	1	AA033635	Human Factor V gen
1781	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1854	13.2	0.8	20	1	AA033635	Human Factor V gen
1782	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1855	13.2	0.8	20	1	AA033635	Human Factor V gen
1783	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1856	13.2	0.8	20	1	AA033635	Human Factor V gen
1784	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1857	13.2	0.8	20	1	AA033635	Human Factor V gen
1785	13.2	0.8	19	1	AA082980	cdk6 ribozyme bind	1858	13.2	0.8	20	1	AA033635	Human Factor V gen

1859	13.2	0.8	20	1	AAA27774	3' Mutagenic prime	1932	13.2	0.8	20	1	ABL90897	Human protein kina
1860	13.2	0.8	20	1	AAZ00195	PCR primer to crea	1933	13.2	0.8	20	1	ABL39512	Human calreticulin
1861	13.2	0.8	20	1	AAZ71480	Human biallelic wa	c1934	13.2	0.8	20	1	ABL43372	Human chromosome 1
1862	13.2	0.8	20	1	AAZ74216	Human biallelic wa	1935	13.2	0.8	20	1	ABL44633	Human chromosome 1
1863	13.2	0.8	20	1	AAZ35086	Herpesvirus entry	1936	13.2	0.8	20	1	ABL45031	Human chromosome 1
1864	13.2	0.8	20	1	AAZ39022	HER22 3' primer	c1937	13.2	0.8	20	1	ABL44662	Human chromosome 1
1865	13.2	0.8	20	1	AAZ36654	Murine IL-5 antisense	1938	13.2	0.8	20	1	ABK70813	Human TSP1 domain
1866	13.2	0.8	20	1	AAZ58803	B. thuringiensis p	1939	13.2	0.8	20	1	AAZ41105	PXY15 (+) upstream
1867	13.2	0.8	20	1	AAZ58796	B. thuringiensis p	1940	13.2	0.8	20	1	ABS59726	Mycobacterium-spec
1868	13.2	0.8	20	1	AAZ98597	Human MAPK kinase	1941	13.2	0.8	20	1	ABT12977	Human damage speci
1869	13.2	0.8	20	1	AAZ93982	Sequencing primer	1942	13.2	0.8	20	1	AAI72997	M3 Muscarinic rece
1870	13.2	0.8	20	1	AAAG60473	Murine factor V PC	1943	13.2	0.8	20	1	ABQ75983	HCV AB008441 fragm
1871	13.2	0.8	20	1	AACT04442	Single nucleotide	c1944	13.2	0.8	20	1	ABZ30199	Candida albicans G
1872	13.2	0.8	20	1	AACT04499	Single nucleotide	1945	13.2	0.8	20	1	ABZ30035	Candida albicans G
1873	13.2	0.8	20	1	AACT05008	Single nucleotide	c1946	13.2	0.8	20	1	ABZ29930	Candida albicans G
1874	13.2	0.8	20	1	AACT05005	Single nucleotide	1947	13.2	0.8	20	1	ABZ29930	Barley microstell
1875	13.2	0.8	20	1	AACT04327	Single nucleotide	1948	13.2	0.8	20	1	AAI70753	Human BSMR gene po
1876	13.2	0.8	20	1	AAZ92140	Human lhx3 exon lb	c1949	13.2	0.8	20	1	AAZ34347	Human inhibitor of
1877	13.2	0.8	20	1	AAZ76624	Intronic primer (3	c1950	13.2	0.8	20	1	AAZ16646	ECRP gene related
1878	13.2	0.8	20	1	AAZ93962	PCR primer used fo	1951	13.2	0.8	20	1	ABZ43473	Human APOA1 methyl
1879	13.2	0.8	20	1	AAZ80516	ASTH1 polymorphic	1952	13.2	0.8	20	1	ABZ27993	Human cancer promo
1880	13.2	0.8	20	1	AAZ83121	Cell cycle regulat	c1953	13.2	0.8	20	1	ABX17336	Human CS193 EST-sp
1881	13.2	0.8	20	1	AAZ32829	Human B7-1 mRNA an	c1954	13.2	0.8	20	1	AAZ35936	Human E2F transcri
1882	13.2	0.8	20	1	AAZ06580	Human alpha(1) co	c1955	13.2	0.8	20	1	ABZ34924	Human E2F transcri
1883	13.2	0.8	20	1	AAZ89201	Trehalase consensus	1956	13.2	0.8	20	1	ABZ05400	Human IL-1beta PCR
1884	13.2	0.8	20	1	AAZ57157	Human E2F transcri	1957	13.2	0.8	20	1	ABN74963	Human MNR SLC4A3 C
1885	13.2	0.8	20	1	AAZ72973	Human dact inhibi	c1958	13.2	0.8	20	1	ABN74961	Human MNR SLC4A3 G
1886	13.2	0.8	20	1	AAZ51132	5' RT-PCR primer f	c1959	13.2	0.8	20	1	ABZ34302	Human PGA loci amp
1887	13.2	0.8	20	1	AAZ59233	Human PARP-3 antis	c1960	13.2	0.8	20	1	ABZ34302	Human D3S2432 loci
1888	13.2	0.8	20	1	AAZ57080	Human oestrogen re	c1961	13.2	0.8	20	1	ABZ34302	Capture oligonucle
1889	13.2	0.8	20	1	AAZ95464	3' primer for DNAs	c1962	13.2	0.8	20	1	ABZ34302	Capture oligonucle
1890	13.2	0.8	20	1	AAZ37380	PCR primer #49.. H	1963	13.2	0.8	20	1	ABZ34302	Capture oligonucle
1891	13.2	0.8	20	1	AAZ55564	BMV 35kDa protein	1964	13.2	0.8	20	1	ABZ34302	Capture oligonucle
1892	13.2	0.8	20	1	AAZ55518	PCR primer used to	1965	13.2	0.8	20	1	ABZ34302	Capture oligonucle
1893	13.2	0.8	20	1	AAZ92566	Human nucleolin ph	c1966	13.2	0.8	20	1	ABZ34302	Bovine epithelial
1894	13.2	0.8	20	1	AAZ10665	Human caspase 3 an	c1967	13.2	0.8	20	1	ABZ34302	Mouse casein kinas
1895	13.2	0.8	20	1	AAZ10621	Human caspase 3 an	1968	13.2	0.8	20	1	ABZ34302	PCR primer for pro
1896	13.2	0.8	20	1	AAZ10674	Human caspase 3 an	c1969	13.2	0.8	20	1	ABZ34302	Human insulin LC R
1897	13.2	0.8	20	1	AAZ29978	PCR primer used to	c1970	13.2	0.8	20	1	ABZ34302	Human GTP-Rho bind
1898	13.2	0.8	20	1	AAH63134	Shrimp white spot	1971	13.2	0.8	20	1	ABZ34302	Apo B454 DNA ampl
1899	13.2	0.8	20	1	AAH67485	Probe sequence use	c1972	13.2	0.8	20	1	ABZ34302	Human oligonucleot
1900	13.2	0.8	20	1	AAZ88759	Human catenin-bind	c1973	13.2	0.8	20	1	ABZ34302	Human octatin olig
1901	13.2	0.8	20	1	AAZ54433	Primer for amplif	c1974	13.2	0.8	20	1	ABZ34302	Human tryptase b o
1902	13.2	0.8	20	1	AAZ32027	Oligonucleotide fo	c1975	13.2	0.8	20	1	ABZ34302	Human oligonucleot
1903	13.2	0.8	20	1	AAZ31511	Oligonucleotide fo	c1976	13.2	0.8	20	1	ABZ34302	Human oligonucleot
1904	13.2	0.8	20	1	AAZ14904	Enhanced green flu	c1977	13.2	0.8	20	1	ABZ34302	Human oligonucleot
1905	13.2	0.8	20	1	AAZ1298	Human E2F transcri	c1978	13.2	0.8	20	1	ABZ34302	Human oligonucleot
1906	13.2	0.8	20	1	AAZ12674	Human alpha2/alpha	c1979	13.2	0.8	20	1	ABZ34302	Human oligonucleot
1907	13.2	0.8	20	1	AAZ4641	Human HLA Class I	1980	13.2	0.8	20	1	ABZ34302	Human oligonucleot
1908	13.2	0.8	20	1	AAZ64788	Human carbonyl red	c1981	13.2	0.8	20	1	ABZ34302	Human oligonucleot
1909	13.2	0.8	20	1	AAZ70324	Synthetic antisens	c1982	13.2	0.8	20	1	ABZ34302	Human oligonucleot
1910	13.2	0.8	20	1	AAZ70367	Synthetic antisens	1983	13.2	0.8	20	1	ABZ34302	Human oligonucleot
1911	13.2	0.8	20	1	AAZ79555	Reverse primer for	1984	13.2	0.8	20	1	ABZ34302	Human oligonucleot
1912	13.2	0.8	20	1	AAZ38332	Human D3S2432 locu	1985	13.2	0.8	20	1	ABZ34302	Human oligonucleot
1913	13.2	0.8	20	1	AAZ38332	Human FGA locus am	1986	13.2	0.8	20	1	ABZ34302	Human oligonucleot
1914	13.2	0.8	20	1	AAZ5267	Human gene methyl	c1987	13.2	0.8	20	1	ABZ34302	Human oligonucleot
1915	13.2	0.8	20	1	AAZ5267	Oligonucleotide #1	c1988	13.2	0.8	20	1	ABZ34302	Human oligonucleot
1916	13.2	0.8	20	1	AAZ35423	Panconi anaemia FA	c1989	13.2	0.8	20	1	ABZ34302	Human oligonucleot
1917	13.2	0.8	20	1	AAZ13261	Cytomegalovirus pr	c1990	13.2	0.8	20	1	ABZ34302	Human oligonucleot
1918	13.2	0.8	20	1	AAZ44416	Real-time PCR LC R	c1991	13.2	0.8	20	1	ABZ34302	Human oligonucleot
1919	13.2	0.8	20	1	AAZ10330	Human API4 antisen	1992	13.2	0.8	20	1	ABZ34302	Human oligonucleot
1920	13.2	0.8	20	1	AAZ21953	Murine SAC1 gene-s	c1993	13.2	0.8	20	1	ABZ34302	Human oligonucleot
1921	13.2	0.8	20	1	AAZ97857	Maturation/activat	c1994	13.2	0.8	20	1	ABZ34302	Human oligonucleot
1922	13.2	0.8	20	1	AAZ42936	Maturation/activat	c1995	13.2	0.8	20	1	ABZ34302	Human oligonucleot
1923	13.2	0.8	20	1	AAZ42936	Primer #1 for anal	c1996	13.2	0.8	20	1	ABZ34302	Human oligonucleot
1924	13.2	0.8	20	1	AAZ98790	Glyceroldehyde 6-p	c1997	13.2	0.8	20	1	ABZ34302	Human oligonucleot
1925	13.2	0.8	20	1	AAZ7487	Rat protein phosph	c1998	13.2	0.8	20	1	ABZ34302	Human IFNGRI antis
1926	13.2	0.8	20	1	AAZ34055	Human APOA1 PCR pr	c1999	13.2	0.8	20	1	ABZ34302	Transforming grow
1927	13.2	0.8	20	1	AAZ93265	T. tauschii/wheat	2000	13.2	0.8	20	1	ABZ34302	PCR primer #1, us
1928	13.2	0.8	20	1	AAZ93265	Dog multichdrug resi	c2001	13.2	0.8	20	1	ABZ34302	Human interleukin
1929	13.2	0.8	20	1	AAZ93265	C. glutamicum flva	c2002	13.2	0.8	20	1	ABZ34302	DPPI0 PCR primer #
1930	13.2	0.8	20	1	AAZ93265	Human F1P1B antisense	2003	13.2	0.8	20	1	ABZ34302	Bovine DGAT PCR pr
1931	13.2	0.8	20	1	AAZ20555	Human uroplakin II	c2004	13.2	0.8	20	1	ABZ34302	Human CS193 gene s

c2005	13.2	0.8	20	1	ACC42413	Acyl CoA cholesterol	c2078	13	0.7	15	1	AAA29401	Acid/base ortholog
c2006	13.2	0.8	20	1	ADA44761	Antisense oligonuc	c2079	13	0.7	15	1	AAF50615	IGF-1 oligonucleot
c2007	13.2	0.8	20	1	ABV74820	Human scavenger re	c2080	13	0.7	15	1	AAF50621	IGF-1 oligonucleot
c2008	13.2	0.8	20	1	AAD55888	Human CN-1 gene am	c2081	13	0.7	15	1	AAS19610	ASO probe #2 to D3
c2009	13.2	0.8	20	1	ABQ77182	Human ABCG12 intro	c2082	13	0.7	15	1	AAD25201	Human homeo box D3
c2010	13.2	0.8	20	1	ACC49693	Human KSR chimeric	c2083	13	0.7	15	1	ABQ72266	Human CYP2D6 allel
c2011	13.2	0.8	20	1	ACC79479	STI strain B relat	c2084	13	0.7	15	1	ABX54339	Human SCYA26 gene
c2012	13.2	0.8	20	1	ACC79478	STI strain B relat	c2085	13	0.7	15	1	ABX79342	EST polymorphic DN
c2013	13.2	0.8	20	1	ABX04308	Mouse interleukin	c2086	13	0.7	16	1	AA60762	Core sequence of m
c2014	13.2	0.8	20	1	ABX17718	Human urokinase pl	c2087	13	0.7	16	1	AA60764	Core sequence of m
c2015	13.2	0.8	20	1	ABX17777	Mouse urokinase pl	c2088	13	0.7	17	1	AAW74926	Human KDR VEGF rec
c2016	13.2	0.8	20	1	ACC46044	Human LRPS PCR pri	c2089	13	0.7	17	1	AAW71552	Human ftr-1 VEGF r
c2017	13.2	0.8	20	1	ABT16308	Zinc finger protei	c2090	13	0.7	17	1	AAW74910	Mouse ftr-1 VEGF r
c2018	13.2	0.8	20	1	ADA20454	Prostate tumour re	c2091	13	0.7	17	1	AAW74910	Mutant primer for
c2019	13.2	0.8	20	1	ADA84261	Human APOAI PCR pr	c2092	13	0.7	17	1	AAW74910	Hammerhead ribozym
c2020	13.2	0.8	20	1	AAD55134	GAPDH-specific PCR	c2093	13	0.7	17	1	ABK03634	Human CD20 DNzyme
c2021	13.2	0.8	20	1	ABT43254	Neuroblastoma-rela	c2094	13	0.7	17	1	ABK03634	Human NOGO Hammerh
c2022	13.2	0.8	20	1	ABD12752	Human PRKR exon 10	c2095	13	0.7	17	1	AAH21294	Human MDR-1 allele
c2023	13.2	0.8	20	1	ACC71728	VEGFR-2 antisense	c2096	13	0.7	17	1	AAH21293	Human MDR-1 allele
c2024	13.2	0.8	20	1	ACCT14675	Human cancer-testi	c2097	13	0.7	17	1	ABL46617	Human GRID NCH rib
c2025	13.2	0.8	20	1	AAW33849	PCR primer #6 used	c2098	13	0.7	17	1	ABL46617	Human GRID zinczyme
c2026	13.2	0.8	20	1	ABZ59534	Mouse src-c chimr	c2099	13	0.7	17	1	ABF46944	Human multi drug r
c2027	13.2	0.8	20	1	ABZ59472	Human src-c chimr	c2100	13	0.7	17	1	ABF46944	Human multi drug r
c2028	13.2	0.8	20	1	ABZ59425	Human src-c chimr	c2101	13	0.7	17	1	ABF575014	Human PAPF-Ea asso
c2029	13.2	0.8	20	1	AAAD49681	Human degenerate V	c2102	13	0.7	17	1	ABK56595	Human CLCA1 gene e
c2030	13.2	0.8	20	1	ABX10794	Human dual specifi	c2103	13	0.7	17	1	ACCS1414	Human tumour suppr
c2031	13.2	0.8	20	1	AAD55465	Human FGFR-3 anti	c2104	13	0.7	17	1	ABT39111	Tumour suppression
c2032	13.2	0.8	20	1	ABT32365	Neuroblastoma-rela	c2105	13	0.7	17	1	ABT39111	Tumour suppression
c2033	13.2	0.8	20	1	ADA20995	Mouse BAX chimeric	c2106	13	0.7	17	1	ACD64944	HCV minus strand D
c2034	13.2	0.8	20	1	ACC45267	Human EMC1 PCR pr	c2107	13	0.7	17	1	ACD64943	HCV minus strand D
c2035	13.2	0.8	20	1	ACF39635	MHC class II trans	c2108	13	0.7	17	1	ACD57726	HCV DNzyme substr
c2036	13.2	0.8	20	1	ADBI17791	5' Light chain var	c2109	13	0.7	17	1	ACF62526	HCV DNzyme substr
c2037	13.2	0.8	20	1	AAL61797	Human ETBR-LP-2 an	c2110	13	0.7	17	1	ACF67513	Cancer based on Cy
c2038	13.2	0.8	20	1	ADA38112	Antisense oligo CG	c2111	13	0.7	17	1	ADB21197	Murine oligonucleo
c2039	13.2	0.8	20	1	ACH11176	Human protein kina	c2112	13	0.7	17	1	ADB88286	MRP1 based cancer
c2040	13.2	0.8	20	1	ABT44381	Chimeric antisense	c2113	13	0.7	17	1	ADB88286	Human UGT1A1 varia
c2041	13.2	0.8	20	1	ACD05247	Tumour necrosis fa	c2114	13	0.7	17	1	ADB82930	Tumour suppression
c2042	13.2	0.8	20	1	ACD05291	Tumour necrosis fa	c2115	13	0.7	17	1	ADB82930	Tumour suppression
c2043	13.2	0.8	20	1	AAL61532	Human inhibitor-ka	c2116	13	0.7	17	1	ADB92460	Human MDR1 variant
c2044	13.2	0.8	20	1	ACH66407	Bovine calcium act	c2117	13	0.7	17	1	ADB92460	Human MDR1 variant
c2045	13.2	0.8	20	1	ADBY4202	Human hepatocyte n	c2118	13	0.7	18	1	AAQ51575	Tumour suppression
c2046	13.2	0.8	20	1	ACF79307	Insulin LC RED pro	c2119	13	0.7	18	1	AAQ51575	Bases 1999-2016 of
c2047	13.2	0.8	20	1	ADB73445	Human cancer assoc	c2120	13	0.7	18	1	AAV71210	HasNPV polyhedrin
c2048	13.2	0.8	20	1	ADB98774	LRPS-related oligo	c2121	13	0.7	18	1	AAV71210	Probe HBP248 for
c2049	13.2	0.8	20	1	ADB68620	Microsomal triglyc	c2122	13	0.7	18	1	AAQ34424	L. mexicana kinase
c2050	13.2	0.8	20	1	ADC13630	Human NOVX forward	c2123	13	0.7	19	1	AAQ34424	PCR primer #1 for
c2051	13.2	0.8	20	1	ADC42498	FANCD2 PCR primer	c2124	13	0.7	19	1	AAH57595	cdki ribozyme bind
c2052	13.2	0.8	20	1	ADC51385	Human zinc finger	c2125	13	0.7	19	1	AAQ51575	Cell-cycle depende
c2053	13.2	0.8	20	1	ADC51502	Zinc finger protei	c2126	13	0.7	19	1	AAQ51575	Stearoyl-CoA desat
c2054	13.2	0.8	20	1	ADC18673	Chimeric oligonuc	c2127	13	0.7	20	1	AAQ51575	Stearoyl-CoA desat
c2055	13.2	0.8	20	1	ADC35555	Human CB1/TAPA-1	c2128	13	0.7	20	1	AAQ51575	20 alpha-hydroxyst
c2056	13.2	0.8	20	1	ADD11692	PDE11A PCR primer	c2129	13	0.7	20	1	AAQ51575	Antisense oligonuc
c2057	13.2	0.8	20	1	ADD14578	Human arc biomarke	c2130	13	0.7	20	1	AAV33590	Probe for amplifi
c2058	13.2	0.8	20	1	ADD31148	Human microsatelli	c2131	13	0.7	20	1	AAV33590	Murine B7-1 target
c2059	13.2	0.8	20	1	ADD31179	I-Cpall DSB recogn	c2132	13	0.7	20	1	AAV33590	Nucleotide sequenc
c2060	13.2	0.8	20	1	ADD62238	SNP typing-related	c2133	13	0.7	20	1	AAV33590	Nucleotide sequenc
c2061	13.2	0.8	20	1	ADD62238	Human haematopiet	c2134	13	0.7	20	1	AAV33590	Bos taurus DNase I
c2062	13.2	0.8	20	1	ADD56569	Human gene express	c2135	13	0.7	20	1	AAV33590	PCR primer for ant
c2063	13.2	0.8	20	1	ADD13551	HIA class II allel	c2136	13	0.7	20	1	AAV33590	Human GPC4 exon 7B
c2064	13.2	0.8	20	1	ADE34268	Chlamydomonas pall	c2137	13	0.7	20	1	AAZ10828	CDK4 specific anti
c2065	13.2	0.8	20	1	ADE34249	I-Cpall DSB recogn	c2138	13	0.7	20	1	AAZ10828	Oligonucleotide #1
c2066	13.2	0.8	20	1	ADP27764	Human B7-1 mRNA ta	c2139	13	0.7	20	1	AAZ10828	Oligonucleotide #8
c2067	13.2	0.8	20	1	AAE97411	Human gene single	c2140	13	0.7	20	1	AAZ10828	Oligonucleotide #1
c2068	13.2	0.7	13	1	ABH11825	Oligonucleotide SE	c2141	13	0.7	20	1	AAZ10828	Oligonucleotide #1
c2069	13.2	0.7	13	1	ABF60423	Oligonucleotide SE	c2142	13	0.7	20	1	AAZ10828	Oligonucleotide #8
c2070	13.2	0.7	13	1	ABH119824	Oligonucleotide SE	c2143	13	0.7	20	1	AAZ10828	Oligonucleotide #1
c2071	13.2	0.7	13	1	ABF60422	Oligonucleotide SE	c2144	13	0.7	20	1	AAZ10828	Oligonucleotide #1
c2072	13.2	0.7	13	1	ABH22348	Oligonucleotide SE	c2145	13	0.7	20	1	AAZ10828	Oligonucleotide #1
c2073	13.2	0.7	13	1	ABH22357	Oligonucleotide SE	c2146	13	0.7	20	1	AAZ10828	Oligonucleotide #1
c2074	13.2	0.7	13	1	ABH22356	Oligonucleotide SE	c2147	13	0.7	20	1	AAZ10828	Oligonucleotide #1
c2075	13.2	0.7	13	1	ABH22349	Oligonucleotide SE	c2148	13	0.7	20	1	AAZ10828	Oligonucleotide #1
c2076	13.2	0.7	13	1	AAT55030	Human reifA hammer	c2149	13	0.7	20	1	AAZ10828	Oligonucleotide #1
c2077	13.2	0.7	15	1	AAZ07073	Peptide nucleic ac	c2150	13	0.7	20	1	AAZ10828	Oligonucleotide #1

c2151 13 0.7 20 1 AAH26782
c2152 13 0.7 20 1 RAD15710
c2153 13 0.7 20 1 AAF75042
c2154 13 0.7 20 1 ABZ72109
c2155 13 0.7 20 1 ABZ72109
c2156 13 0.7 20 1 ABQ87920
c2157 13 0.7 20 1 AAL43510
c2158 13 0.7 20 1 ABL45369
c2159 13 0.7 20 1 ABK99609
c2160 13 0.7 20 1 AB198277
c2161 13 0.7 20 1 ADE52880
c2162 13 0.7 20 1 ABZ85602
c2163 13 0.7 20 1 ABZ90116
c2164 13 0.7 20 1 ABZ87971
c2165 13 0.7 20 1 ABZ84778
c2166 13 0.7 20 1 ABZ92731
c2167 13 0.7 20 1 ADA66484
c2168 13 0.7 20 1 ACC82803
c2169 13 0.7 20 1 ABV76834
c2170 13 0.7 20 1 ABT21529
c2171 13 0.7 20 1 ACD07334
c2172 13 0.7 20 1 ABX70575
c2173 13 0.7 20 1 ABX74962
c2174 13 0.7 20 1 ABX75057
c2175 13 0.7 20 1 AAL62661
c2176 13 0.7 20 1 ACD05067
c2177 13 0.7 20 1 ADE06718
c2178 13 0.7 20 1 ADE86779
c2179 13 0.7 20 1 ADE27804
c2180 12.8 0.7 19 1 AAQ06520
c2181 12.8 0.7 20 1 ABZ88226
c2182 12.8 0.7 20 1 ADA44761
c2183 12.6 0.7 19 1 AAZ48738
c2184 12.6 0.7 19 1 AAH84464
c2185 12.6 0.7 19 1 AAH59626
c2186 12.6 0.7 20 1 AAL40334
c2187 12.6 0.7 22 1 AAQ43226
c2188 12.6 0.7 23 1 AAZ23767
c2189 12.4 0.7 19 1 AAA14782
c2190 12.4 0.7 19 1 AAX04627
c2191 12.4 0.7 20 1 ACF04494
c2192 12.4 0.7 20 1 AAH48603
c2193 12.4 0.7 20 1 ADD22540
c2194 12.4 0.7 23 1 AAX57349
c2195 12.2 0.7 17 1 ACA06589

ALIGNMENTS

RESULT 1
ID ABA04099 standard; DNA; 33 BP.
XX ABA04099;
AC ABA04099;
XX 21-FEB-2002 (first entry)
XX Human Cdk5 related PCR primer SEQ ID NO:18.
DE Human; beta-amyloid; cyclin-dependent kinase inhibitor; nerve cell;
XX amyloid precursor protein; APP; Cdk5; PCR primer; ss.
XX Homo sapiens.
XX WO200182967-A1.
XX 08-NOV-2001.
XX 25-APR-2001; 2001WO-JP003555.
XX 28-APR-2000; 2000JP-00131037.

Mouse T cell recep
Equine influenza v
Primer #14. Homo
Gene 216 SSCP seq
Gene 216 SSCP sequ
Enterohaemorrhagic
Human DB2 antisen
Human chromosome 2
Adenovirus vector
Capture oligonucle
FEN-1 related DNA
Human oligonucleot
Human oligonucleot
Human oligonucleot
Human oligonucleot
Transforming growt
Human PUA2 antisen
Primer used to amp
Multiplex group PC
Host cell specific
PCR primer #1 for
Human gene 216 pol
Human gene 216 pol
Human CD36 antigen
Tumour necrosis fa
Hepatitis E virus
c-kit primer #1.
Mouse B7-1 mRNA ta
Probe/primer TB-9
Human oligonucleot
Antisense oligonuc
Human alpha1-antit
Cyclin D3 ribozyme
Cyclin D3 ribozyme
Human caspase 6 an
B-B10 V region pri
Cloning vector mul
PCR primer used to
PCR primer Tusa4R u
Real time PCR targ
Human fascic assoc
Flatfish rhadovir
Parvovirus B19 PCR
NFKB sub-unit modu

PA (YAMA) YAMANOUCHI PHARM CO LTD.
PA (SUZU/) SUZUKI T.

PI Suzuki T, Watanabe T, Kawabata S, Hachiya S;
XX WPI; 2002-026209/03.

XX Medicinal compositions for the treatment of dementia and Alzheimer's
XX disease, comprise compounds that suppress beta amyloid production.

XX Example 6; Page 23; 62pp; Japanese.

XX The present invention describes medicinal compositions (I) inhibiting
XX beta-amyloid production comprising an active component a substance that
XX inhibits the activity of cyclin-dependent kinase (CDK). Also described
XX are: (1) a method for screening compounds for their ability to inhibit
XX the production of beta-amyloid by contacting with beta-amyloid producing
XX cells; and (2) screening kits. (I) have neurotropic and neuroprotective
XX activities. (I) suppress the phosphorylation of amyloid precursor protein
XX (APP) which is an essential step in the production of beta-amyloid. (I)
XX can be used in the treatment and prevention of neurodegenerative diseases
XX such as dementia and Alzheimer's disease. The present sequence represents
XX a PCR primer which is used in the exemplification of the present
XX invention

XX Sequence 33 BP; 6 A; 6 C; 11 G; 10 T; 0 U; 0 Other;

XX Query Match 1.3%; Score 22.4; DB 1; Length 33;

XX Best Local Similarity 81.2%; Pred. No. 31;

XX Matches 26; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1018 GAGCTCAGCTGGCTGACTTGGCTGGCCG 1049

DB 2 GAGCTGAATTGGCTAATTGGCTGGCTCG 33

RESULT 2

ABA04100/c

ID ABA04100 standard; DNA; 33 BP.

XX ABA04100;

XX 21-FEB-2002 (first entry)

XX Human Cdk5 related PCR primer SEQ ID NO:19.

XX Human; beta-amyloid; cyclin-dependent kinase inhibitor; nerve cell;

XX amyloid precursor protein; APP; Cdk5; PCR primer; ss.

XX Homo sapiens.

XX WO200182967-A1.

XX 08-NOV-2001.

XX 25-APR-2001; 2001WO-JP003555.

XX 28-APR-2000; 2000JP-00131037.

XX (YAMA) YAMANOUCHI PHARM CO LTD.

XX (SUZU/) SUZUKI T.

XX Suzuki T, Watanabe T, Kawabata S, Hachiya S;

XX WPI; 2002-026209/03.

XX Medicinal compositions for the treatment of dementia and Alzheimer's
XX disease, comprise compounds that suppress beta amyloid production.

XX Example 6; Page 23; 62pp; Japanese.

XX The present invention describes medicinal compositions (I) inhibiting
XX beta-amyloid production comprising an active component a substance that


```
Db          2 GACATCAAGCCCAAGAACCTGCTGGTGGAC 31
|||||
RESULT 5
AAI29606
ID AAI29606 standard; DNA; 31 BP.
XX
AC AAI29606;
XX
DT 18-OCT-2001 (first entry)
XX
DE Human single nucleotide polymorphism (SNP) PCTAIRE3 1.
XX
KW Human; resequence; genotype; disease; forensic; paternity testing;
KW single nucleotide polymorphism; SNP; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Variation replace(16,C)
FT /*tag= a
FT /standard_name= "single nucleotide polymorphism"
PN WO200166800-A2.
XX
PD 13-SEP-2001.
XX
PF 07-MAR-2001; 2001WO-US007268.
XX
PR 07-MAR-2000; 2000US-0187510P.
XX
PR 22-MAY-2000; 2000US-0206129P.
XX
PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX
PI Cargill M, Ireland JS, Lander ES;
XX
DR WPI; 2001-522952/57.
XX
PT Nucleic acid molecules from the human genome which include polymorphic
PT sites, useful in methods for predicting the presence, absence or severity
PT of a particular phenotype or disorder (e.g. diabetes) associated with a
PT particular genotype.
XX
PS Claim 1; Page 34; 145pp; English.
XX
CC The invention relates to the identification of nucleic acid molecules
CC (AAI29513-AAI31314) from the human genome which include polymorphic sites
CC which can predispose individuals to disease. Various genes from a number
CC of individuals were resequenced and single nucleotide polymorphisms
CC (SNPs) in these genes discovered. The method is useful for predicting the
CC presence, absence or severity of a particular phenotype or disorder (e.g.
CC diabetes) associated with a particular genotype. The nucleic acids
CC containing the polymorphic sites may be useful in forensics and paternity
CC testing
XX
SQ Sequence 31 BP; 6 A; 9 C; 8 G; 8 T; 0 U; 0 Other;
Query Match 1.2%; Score 21.4; DB 1; Length 31;
Best Local Similarity 80.6%; Pred. No. 46;
Matches 25; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 577 GTACCCATCTGAGATGGCTTTGGGAAC 607
DB 1 GCCTCCCTGTCAGACATGTGCTTTGGGAAC 31

RESULT 6
AAH62195
ID AAH62195 standard; DNA; 21 BP.
XX
AC AAH62195;
XX
```

```
DT 12-SEP-2001 (first entry)
XX
DE PCTAIRE-1 polymorphism containing DNA fragment #96.
XX
KW Single nucleotide polymorphism; SNP; human; cancer; inflammation;
KW heart disease; paternity testing; forensic science; ds.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Variation replace(11,G)
FT /*tag= a
FT /standard_name= "single nucleotide polymorphism"
XX
PN WO200138576-A2.
XX
PD 31-MAY-2001.
XX
PF 17-NOV-2000; 2000WO-US031639.
XX
PR 24-NOV-1999; 99US-0167334P.
XX
PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX
PI Cargill M, Ireland JS, Lander ES;
XX
DR WPI; 2001-367705/38.
XX
PT New nucleic acid segments of the human genome, particularly from genes
PT including polymorphic sites, for phenotype correlation, forensics,
PT paternity testing, medicine and genetic analysis.
XX
PS Claim 1; Page 37; 80pp; English.
XX
CC DNA sequences AAH62100 - AAH62688 represent segments of human genes which
CC contain single nucleotide polymorphisms (SNPs). A method is included in
CC the invention for analysing a nucleic acid sample, which consists of
CC determining the base occupying any one of the polymorphic sites given in
CC the SNP containing sequences. The nucleotide sequences can be used in the
CC diagnosis or monitoring of diseases, such as cancer, inflammation, heart
CC diseases, diseases of the cardiovascular system, and infection by
CC microorganisms. The oligonucleotides are also useful in the manufacture
CC of a medicament for the treatment or prophylaxis of the diseases, and as
CC a pharmaceutical. SNP containing oligonucleotides are useful in
CC applications such as phenotype correlation, forensics, paternity testing,
CC medicine and genetic analysis
XX
SQ Sequence 21 BP; 9 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
Query Match 1.2%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 35;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 702 CAAGGAGATCAGACTGGAACA 722
DB 1 CAAGGAGATCAGACTGGAACA 21

RESULT 7
AAI61700/c
ID AAI61700 standard; DNA; 20 BP.
XX
AC AAI61700;
XX
DT 22-SEP-2003 (first entry)
XX
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204137.
XX
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
```


KW antisense; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
XX
PH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or thrombocytopenia.
XX
XX Example 15; Page 73; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
XX
SQ Sequence 20 BP; 2 A; 9 C; 2 G; 7 T; 0 U; 0 Other;
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 27 AATGCAGAGGTAGGCAGGAG 46
DB 20 AATGCAGAGGTAGGCAGGAG 1
RESULT 8
ID AAL61714/c
XX AAL61714 standard; DNA; 20 BP.
AC AAL61714;
XX

DT 22-SEP-2003 (first entry)
XX
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204151.
XX
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopenia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PCK1; crk5; incontinentia pigmenti; phosphorothioate backbone; antisense; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
XX
PH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
XX
SQ Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 273 TCGTGCCTCGGGGAACTTC 292
|||||

DB 20 TGCTGCTCCTGGGGAATTC 1

RESULT 9
AAL61720/c
ID AAL61720 standard; DNA; 20 BP.
XX
XX
AC AAL61720;
DT 22-SEP-2003 (first entry)
XX
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204157.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
OS Homo sapiens.
OS Synthetic.

XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.

XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopaenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention

XX Sequence 20 BP; 3 A; 9 C; 2 G; 6 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 335 ACGAGGACTTGAAGATGGG 354
DB 20 ACGAGGACTTGAAGATGGG 1
|||||
RESULT 10
AAL61749/c
ID AAL61749 standard; DNA; 20 BP.
XX
XX AAL61749;
DT 22-SEP-2003 (first entry)
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204186.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
XX Homo sapiens.
XX Synthetic.

XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.

XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopaenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention

CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
SQ Sequence 20 BP; 7 A; 2 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1232 AGCTACACTTCATCTCCCGT 1251
DB 20 AGCTACACTTCATCTCCCGT 1

RESULT 11
AAL61759/c
ID AAL61759 standard; DNA; 20 BP.
XX
AC AAL61759;
DT 22-SEP-2003 (first entry)
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204196.

Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
hyperproliferative disease; neurological disease; thrombocytopenia;
retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
PCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
antisense; ss.

Homo sapiens.
Synthetic.
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
methylethylenes"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX
PN WO2003049691-A2.
XX
PD 19-JUN-2003.
XX
PF 06-DEC-2002; 2002WO-US039138.
XX
PR 07-DEC-2001; 2001US-00017621.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
DR
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or

thrombocytopenia.
Claim 3; Page 75; 104pp; English.
The invention relates to antisense compounds, compositions and methods
for modulating the expression of PCTAIRE protein kinase 1 (also known as
PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
treating an animal having a disease or condition associated with PCTAIRE
protein kinase 1, particularly a hyperproliferative disease or a
neurological disease. These diseases include thrombocytopenia, mental
retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
disease, or incontinentia pigmenti. The antisense oligonucleotide is
particularly useful for inhibiting the expression of PCTAIRE protein
kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
or as research reagents or kits. The present sequence is an antisense
oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
sequence is used to illustrate the method of the invention
XX
SQ Sequence 20 BP; 6 A; 7 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1457 TCTTCTCAGTCTGGGGGAG 1476
DB 20 TCTTCTCAGTCTGGGGGAG 1

RESULT 12
AAL61767/c
ID AAL61767 standard; DNA; 20 BP.
XX
AC AAL61767;
DT 22-SEP-2003 (first entry)
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204204.

Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
hyperproliferative disease; neurological disease; thrombocytopenia;
retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
PCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
antisense; ss.

Homo sapiens.
Synthetic.
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
methylethylenes"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX
PN WO2003049691-A2.
XX
PD 19-JUN-2003.
XX
PF 06-DEC-2002; 2002WO-US039138.
XX
PR 07-DEC-2001; 2001US-00017621.

(ISIS-) ISIS PHARM INC.
Freier SM, Roach MP;
WPI; 2003-577271/54.
New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
gene expression, particularly useful for treating hyperproliferative or
neurological disorders for example, mental retardation, or

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PA (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX
XX Claim 3; Page 75; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
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XX DT 22-SEP-2003 (first entry)
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XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.
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XX WO2003049691-A2.
XX
XX PD 19-JUN-2003.
XX
XX PF 06-DEC-2002; 2002WO-US039138.
XX
XX PR 07-DEC-2001; 2001US-00017621.
XX
XX PA (ISIS-) ISIS PHARM INC.
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XX FI Freier SM, Roach MP;
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XX WPI; 2003-577271/54.
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XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopenia, mental
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XX sequence is used to illustrate the method of the invention
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XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
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FT
FT 19-JUN-2003.
FT
FT 06-DEC-2002; 2002WO-US039138.
FT
FT 07-DEC-2001; 2001US-00017621.
FT
FT (ISIS-) ISIS PHARM INC.
FT
FT Freier SM, Roach MP;
FT WPI; 2003-577271/54.
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FT gene expression, particularly useful for treating hyperproliferative or
FT neurological disorders for example, mental retardation, or
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FT
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FT for modulating the expression of PCTAIRE protein kinase 1 (also known as
FT PCTAIRE-1, PRCK1 and crk5). The antisense oligonucleotide is useful for
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FT protein kinase 1, particularly a hyperproliferative disease or a
FT neurological disease. These diseases include thrombocytopenia, mental
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FT particularly useful for inhibiting the expression of PCTAIRE protein
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FT or as research reagents or kits. The present sequence is an antisense
FT oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
FT sequence is used to illustrate the method of the invention
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FT Db
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FT XX AAL61706;
FT AC
FT XX
FT DT 22-SEP-2003 (first entry)
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FT hyperproliferative disease; neurological disease; thrombocytopenia;
FT retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
FT mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
FT PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
FT antisense; ss.

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XX 19-JUN-2003.
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XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
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XX Freier SM, Roach MP;
XX WPI; 2003-577271/54.
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XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
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XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
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XX Sequence 20 BP; 2 A; 7 C; 2 G; 9 T; 0 U; 0 Other;
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XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
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XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
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XX Homo sapiens.
XX Synthetic.
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XX 19-JUN-2003.
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XX 06-DEC-2002; 2002WO-US039138.
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XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
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XX Freier SM, Roach MP;
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XX WPI; 2003-577271/54.
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XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.
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XX The invention relates to antisense compounds, compositions and methods
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XX protein kinase 1, particularly a hyperproliferative disease or a
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XX
XX Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;
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RESULT 17
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XX 22-SEP-2003 (first entry)
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XX hyperproliferative disease; neurological disease; thrombocytopaenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.
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XX Homo sapiens.
XX Synthetic.
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XX 19-JUN-2003.
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XX 06-DEC-2002; 2002WO-US039138.
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XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
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XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
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XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
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XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
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XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX

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KW hyperproliferative disease; neurological disease; thrombocytopaenia;
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KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
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OS Synthetic.
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PR 07-DEC-2001; 2001US-00017621.
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XX WPI; 2003-577271/54.
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XX
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CC
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KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
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PR 07-DEC-2001; 2001US-00017621.
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XX WPI; 2003-577271/54.
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XX KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX KW PCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
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XX DR WPI; 2003-577271/54.
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XX KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX KW PCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX KW antisense; ss.
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XX OS Synthetic.
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XX FT methylethylenes"
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PN WO2003049691-A2.
XX
XX 19-JUN-2003.
PD
XX 06-DEC-2002; 2002WO-US039138.
PF
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
PI
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Claim 3; Page 75; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
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CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
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CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
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ID AAL61768 standard; DNA; 20 BP.
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XX AAL61768;
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XX 22-SEP-2003 (first entry)
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XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204205.
DE
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
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XX Homo sapiens.
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OS
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XX 07-DEC-2001; 2001US-00017621.
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CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
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CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
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ID AAL61718 standard; DNA; 20 BP.
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XX AAL61718;
AC
XX 22-SEP-2003 (first entry)
DT
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204155.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
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OS Homo sapiens.
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PR 07-DEC-2001; 2001US-00017621.
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XX Freier SM, Roach MP;
XX WPI; 2003-577271/54.
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XX
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Best Local Similarity 100.0%; Pred.No. 53;
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QY 312 CAGCTCTGCACGAGATTG 331
DB 20 CAGCTCTGCACGAGATTG 1

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AC AAL61728;
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XX
DT 22-SEP-2003 (first entry)
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DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204165.
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XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone; antisense; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX
FH Key Location/Qualifiers
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FT /tag= a
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FT /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"
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XX Freier SM, Roach MP;
XX WPI; 2003-577271/54.
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XX Claim 3; Page 74; 104pp; English.
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XX
SQ Sequence 20 BP; 4 A; 4 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred.No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 471 GCGCTATCACTACCAGCTG 490
DB 20 GCGCTATCACTACCAGCTG 1

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 Matches 20; Conservative 0; Mismatches 0; Gaps 0;

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 Db 20 TCACCAAGCTGTCAGTTT 1

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 ID AAL61758 standard; DNA; 20 BP.
 AC AAL61758;
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 DT 22-SEP-2003 (first entry)
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 DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204195.
 XX
 KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
 KW hyperproliferative disease; neurological disease; thrombocytopaenia;
 KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
 KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
 KW antisense; ss.
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 WO2003049691-A2.
 19-JUN-2003.
 06-DEC-2002; 2002WO-US039138.
 07-DEC-2001; 2001US-00017621.
 (ISIS-) ISIS PHARM INC.
 Freier SM, Roach MP;
 WPI; 2003-577271/54.
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RESULT 25
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 ID AAL61753 standard; DNA; 20 BP.
 AC AAL61753;
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 DT 22-SEP-2003 (first entry)
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 DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204190.
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 KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
 KW hyperproliferative disease; neurological disease; thrombocytopaenia;
 KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
 KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
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 WO2003049691-A2.
 19-JUN-2003.
 06-DEC-2002; 2002WO-US039138.
 07-DEC-2001; 2001US-00017621.
 (ISIS-) ISIS PHARM INC.
 Freier SM, Roach MP;
 WPI; 2003-577271/54.
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CC
SQ Sequence 20 BP; 7 A; 1 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 20 ACATCCATTCTCTCAGTC 1

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AC AAL61770;
XX
DT 22-SEP-2003 (first entry)
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DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204207.
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KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
OS Homo sapiens.
OS Synthetic.
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XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
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XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
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XX

PS Claim 3; Page 75; 104pp; English.

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SQ Sequence 20 BP; 5 A; 7 C; 6 G; 2 T; 0 U; 0 Other;

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Best Local Similarity 100.0%; Pred. No. 53;
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Db 20 CCAGCTTCGCGTGGGA 1

RESULT 28

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XX

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XX

DT 22-SEP-2003 (first entry)

XX

DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204152.

XX

KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.

XX

OS Homo sapiens.

OS Synthetic.

XX

FH Key Location/Qualifiers

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XX (ISIS-) ISIS PHARM INC.

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Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
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DB 20 CTGGGGAACCTCGTCTGCA 1
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XX 22-SEP-2003 (first entry)
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XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
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XX Synthetic.
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Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
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XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
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PR 07-DEC-2001; 2001US-00017621.
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PA (ISIS-) ISIS PHARM INC.
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PI Freier SM, Roach MP;
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DR WPI; 2003-577271/54.
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CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
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CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
SQ Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1114 GACATCCTGCTGGGTCCAC 1133
 |||||
Db 20 GACATCCTGCTGGGTCCAC 1

RESULT 31
AAL61757/c
ID AAL61757 standard; DNA; 20 BP.

XX
XX AAL61757;
XX
XX
DT 22-SEP-2003 (first entry)
XX

DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204194.

XX Human: PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
XX Homo sapiens.

OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /notes= "Phosphorothioate backbone; All cytidines are 5-
FT methylcytidines"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /notes= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /notes= "2'methoxyethyl nucleotides"
XX
FN WO2003049691-A2.
XX
XX
PD 19-JUN-2003.
XX
XX
PF 06-DEC-2002; 2002WO-US039138.
XX
PR 07-DEC-2001; 2001US-00017621.
XX
XX
PA (ISIS-) ISIS PHARM INC.
XX
XX
PI Freier SM, Roach MP;
XX
XX
DR WPI; 2003-577271/54.
XX
XX
PT New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX
PS Claim 3; Page 75; 104pp; English.

CC The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
SQ Sequence 20 BP; 3 A; 4 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1436 AGGATGCCATGAAACATCCA 1455
 |||||
Db 20 AGGATGCCATGAAACATCCA 1

RESULT 32

AAL61764/c
ID AAL61764 standard; DNA; 20 BP.

XX AAL61764;

DT 22-SEP-2003 (first entry)

DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204201.

XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylethylenes"
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Claim 3; Page 75; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 5 A; 4 C; 3 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 1..11; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred No. 53;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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XX 1506 CATATTTCGCACTAAGGAGA 1525
XX |||||||||
XX 20 CATATTTCGCACTAAGGAGA 1

RESULT 33
AAL61726/C
ID AAL61726 standard; DNA; 20 BP.
XX AAL61726;
XX
XX 22-SEP-2003 (first entry)
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204163.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylethylenes"
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 4 A; 4 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 445 AAGATCTCCACTGAGGACAT 464
D5 20 AAGATCTCCACTGAGGACAT 1
RESULT 34
AAL61740/C
ID AAL61740 standard; DNA; 20 BP.
XX
AC AAL61740;
XX
DT 22-SEP-2003 (first entry)
XX
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204177.
XX
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX WO2003049691-A2.
XX
PD 19-JUN-2003.
XX
PF 06-DEC-2002; 2002WO-US039138.
XX
PR 07-DEC-2001; 2001US-00017621.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Freier SM, Roach MP;
XX
DR WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
PS Claim 3; Page 74; 104pp; English.

CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
SQ Sequence 20 BP; 7 A; 3 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 793 GTTACGCTACATGACATTAT 812
D5 20 GTTACGCTACATGACATTAT 1
RESULT 35
AAL61741/C
ID AAL61741 standard; DNA; 20 BP.
XX
AC AAL61741;
XX
DT 22-SEP-2003 (first entry)
XX
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204178.
XX
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX WO2003049691-A2.
XX
PD 19-JUN-2003.
XX
PF 06-DEC-2002; 2002WO-US039138.
XX
PR 07-DEC-2001; 2001US-00017621.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Freier SM, Roach MP;
XX
DR WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
PS Claim 3; Page 74; 104pp; English.

XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopaenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 2 A; 4 C; 8 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 53;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 814 CACACGGAGAGTCCCTCAC 833
Db 20 CACACGGAGAGTCCCTCAC 1
XX
RESULT 36
AAL61760/c
ID AAL61760 standard; DNA; 20 BP.
XX
AC AAL61760;
XX
XX 22-SEP-2003 (first entry)
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204197.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopaenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1. .20
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XX /note= "2'methoxyethyl nucleotides"
XX /tag= a
XX /note= "Phosphorothioate backbone; All cytidines are 5-
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XX modified_base 1. .5
XX /mod_base= OTHER
XX /tag= b
XX /note= "2'methoxyethyl nucleotides"
XX /tag= c
XX /note= "2'methoxyethyl nucleotides"
XX
XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;

XX MPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopaenia.
XX
XX Claim 3; Page 75; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopaenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 3 A; 9 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 53;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 1465 AGTCTGGGGAGCGGATCCA 1484
Db 20 AGTCTGGGGAGCGGATCCA 1
XX
RESULT 37
AAL61771/c
ID AAL61771 standard; DNA; 20 BP.
XX
AC AAL61771;
XX
XX 22-SEP-2003 (first entry)
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204208.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopaenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1. .20
XX /mod_base= OTHER
XX /note= "Phosphorothioate backbone; All cytidines are 5-
XX methylethyldines"
XX modified_base 1. .5
XX /mod_base= OTHER
XX /tag= b
XX /note= "2'methoxyethyl nucleotides"
XX /tag= c
XX /note= "2'methoxyethyl nucleotides"
XX
XX WO2003049691-A2.

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FT      /mod_base= OTHER
FT      /note='2'methoxyethyl nucleotides"
FT modified_base    16..20
FT FT          /tag= c
FT FT      /mod_base= OTHER
FT FT      /note='2'methoxyethyl nucleotides"
XX
XX PN WO2003049691-A2.
XX XX
XX PD 18-JUN-2003.
XX
XX XX 06-DEC-2002; 2002WO-US039138.
XX PF
XX PR 07-DEC-2001; 2001US-00017621.
XX
XX PA (ISIS-) ISIS PHARM INC.
XX
XX PI Freier SM, Roach MP;
XX DR WPI; 2003-577271/54.
XX
XX PT New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX PS Claim 3; Page 74; 104pp; English.
XX
XX CC The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, FTKI and crks). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX
XX SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
XX
Query Match           1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred.No.53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY      117 GATCGCCATGGATCGGATGA 136
Db       20 GATCGCCATGGATCGGATGA 1
XX
RESULT 39
AAAL61707/c
ID      AAAL61707 standard; DNA; 20 BP.
XX
XX AC AAAL61707;
XX
XX DT 22-SEP-2003 (first entry)
XX
XX DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204144.
XX
XX KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTKCI; crks; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
XX OS Homo sapiens.
XX Synthetic.

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XX Key Location/Qualifiers
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FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylethyldines"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX WO2003049691-A2.
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopaenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 3 A; 6 C; 4 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 53;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 138 GAAGATCAACGGCAGCTGT 157
XX |||||
XX 20 GAAGATCAACGGCAGCTGT 1
XX
XX
XX RESULT 40
XX AAL61724/c
XX ID AAL61724 standard; DNA; 20 BP.
XX
XX AC AAL61724;
XX
XX XX 22-SEP-2003 (first entry)
XX
XX DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204161.
XX
```

```
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylethyldines"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX WO2003049691-A2.
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopaenia.
XX
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopaenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 53;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 406 TCTCCAGTGAGAGTGGTAT 425
XX |||||
XX 20 TCTCCAGTGAGAGTGGTAT 1
XX
XX
XX RESULT 41
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AA161729/c
ID AAL61729 standard; DNA; 20 BP.
XX
AC AAL61729;
XX
DT 22-SEP-2003 (first entry)
XX
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204166.
XX
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
OS Homo sapiens.
OS Synthetic.
FH Key Location/Qualifiers
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FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"
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FT /note= "2'methoxyethyl nucleotides"
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FT /note= "2'methoxyethyl nucleotides"
XX WO2003049691-A2.
XX
PN 19-JUN-2003.
PD
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
PI Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX
PS Claim 3; Page 74; 104pp; English.
XX
CC The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopaenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
SQ Sequence 20 BP; 4 A; 4 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QV 481 CTACCAGCTGACATCGCGCT 500
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DB 20 CTACCAGCTGACATCGCGCT 1
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RESULT 42
AAL61755/c
ID AAL61755 standard; DNA; 20 BP.
XX
AC AAL61755;
XX
DT 22-SEP-2003 (first entry)
XX
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204192.
XX
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
OS Homo sapiens.
OS Synthetic.
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX WO2003049691-A2.
XX
PN 19-JUN-2003.
PD
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
PI Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX
PS Claim 3; Page 74; 104pp; English.
XX
CC The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopaenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
SQ Sequence 20 BP; 4 A; 4 C; 8 G; 4 T; 0 U; 0 Other;

CC particularly useful for inhibiting the expression of PCTAIRE protein
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
 CC or as research reagents or kits. The present sequence is an antisense
 CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
 CC sequence is used to illustrate the method of the invention
 XX
 SQ Sequence 20 BP; 6 A; 7 C; 2 G; 5 T; 0 U; 0 Other;
 Query Match 1.1%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 53;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1402 TTGCAGTTTGAGGGTGGAAA 1421
 Db 20 TTGCAGTTTGAGGGTGGAAA 1
 RESULT 43
 AAL61748/c
 ID AAL61748 standard; DNA; 20 BP.
 XX
 AC AAL61748;
 XX
 DT 22-SEP-2003 (first entry)
 XX
 DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204185.
 XX
 KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
 KW hyperproliferative disease; neurological disease; thrombocytopaenia;
 KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
 KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
 KW antisense; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'methoxyethyl nucleotides"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'methoxyethyl nucleotides"
 XX
 PN WO2003049691-A2.
 XX
 PD 19-JUN-2003.
 XX
 PF 06-DEC-2002; 2002WO-US039138.
 XX
 PR 07-DEC-2001; 2001US-00017621.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Freier SM, Roach MP;
 XX
 DR WPI; 2003-577271/54.
 XX
 PT New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
 PT gene expression, particularly useful for treating hyperproliferative or
 PT neurological disorders for example, mental retardation, or
 PT thrombocytopenia.
 XX
 PS Claim 3; Page 74; 104pp; English.
 XX

CC The invention relates to antisense compounds, compositions and methods
 CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
 CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
 CC treating an animal having a disease or condition associated with PCTAIRE
 CC protein kinase 1, particularly a hyperproliferative disease or a
 CC neurological disease. These diseases include thrombocytopaenia, mental
 CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
 CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
 CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
 CC particularly useful for inhibiting the expression of PCTAIRE protein
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
 CC or as research reagents or kits. The present sequence is an antisense
 CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
 CC sequence is used to illustrate the method of the invention
 XX
 SQ Sequence 20 BP; 4 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
 Query Match 1.1%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 53;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1225 GAGGAACAGCTACACTTCAT 1244
 Db 20 GAGGAACAGCTACACTTCAT 1
 RESULT 44
 AAL61701/c
 ID AAL61701 standard; DNA; 20 BP.
 XX
 AC AAL61701;
 XX
 DT 22-SEP-2003 (first entry)
 XX
 DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204138.
 XX
 KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
 KW hyperproliferative disease; neurological disease; thrombocytopaenia;
 KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
 KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
 KW antisense; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone; All cytidines are 5-
 FT methylethylenes"
 FT modified_base 1..5
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "2'methoxyethyl nucleotides"
 FT modified_base 16..20
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 XX
 PN WO2003049691-A2.
 XX
 PD 19-JUN-2003.
 XX
 PF 06-DEC-2002; 2002WO-US039138.
 XX
 PR 07-DEC-2001; 2001US-00017621.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Freier SM, Roach MP;
 XX

WFI: 2003-577271/54.

New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or thrombocytopenia.

Claim 3; Page 73; 104pp; English.

The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTK1 and Crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention

Sequence 20 BP; 1 A; 9 C; 4 G; 6 T; 0 U; 0 Other;

Query Match	1.1%	Score 20;	DB 1;	Length 20;
Best Local Similarity	100.0%	Pred. NO. 53;		
Matches	20;	Conservative	0;	Mismatches
			0;	Indels
				0;
				Gaps
				0;

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20 AGGTAGGCAGGAGGACCAGC 1

RESULT 45

AAL61723/c

ID AAL61723 standard; DNA; 20 BP.

AC AAL61723;

22-SEP-2003 (first entry)

Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204160.

Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopenia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; parkinsonism; PTK1; Crk5; incontinentia pigmenti; phosphorothioate backbone; antisense; ss.

Homo sapiens.

Synthetic.

Key	Location/Qualifiers
modified_base	1..20
	/tag= a
	/mod_base= OTHER
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modified_base	1..5
	/tag= b
	/mod_base= OTHER
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modified_base	16..20
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WO2003049691-A2.

19-JUN-2003.

XX		06-DEC-2002; 2002WO-US039138.
Pf		
XX		
PR		07-DEC-2001; 2001US-00017621.
XX		(ISIS-) ISIS PHARM INC.
PA		
XX		Freier SM, Roach MP;
PI		
DR		WPI; 2003-577271/54.
XX		
PS		Claim 3; Page 74; 104pp; English.
XX		The invention relates to antisense compounds, compositions and methods
CC		for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC		PCTAIR-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC		treating an animal having a disease or condition associated with PCTAIRE
CC		protein kinase 1, particularly a hyperproliferative disease or a
CC		neurological disease. These diseases include thrombocytopoenia, mental
CC		retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC		with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC		disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC		particularly useful for inhibiting the expression of PCTAIRE protein
CC		kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC		or as research reagents or kits. The present sequence is an antisense
CC		oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC		sequence is used to illustrate the method of the invention
XX		
SQ		Sequence 20 BP; 5 A; 7 C; 5 G; 3 T; 0 U; 0 Other;
Query Match	1.1%; Score 20; DB 1; Length 20;	
Best Local Similarity	100.0%; Pred.No. 53;	
Matches 20; Conservative	0; Mismatches 0; Indels 0; Gaps	
Qy	388 TCCTCGGATGGTGCAGTC 407	
Db	20 TCCTCGGATGGTGCAGTC 1	
RESULT 46		
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ID	AAL61733 standard; DNA; 20 BP.	
XX		
AC	AAL61733;	
XX		
DT	22-SEP-2003 (first entry)	
XX		
DE	Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204170.	
XX		
KW	Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;	
KW	hyperproliferative disease; neurological disease; thrombocytopoenia;	
KW	retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;	
KW	mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;	
KW	PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;	
KW	antisense; ss.	
OS	Homo sapiens.	
OS	Synthetic.	
XX		
FH	Key	Location/Qualifiers
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FT		methylcytidines"
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FT      /note= "2'methoxyethyl nucleotides"  
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DN      WO2003049691-A2.  
XX  
XX  
PD      19-JUN-2003. .  
XX  
XX      06-DEC-2002; 2002WO-US039138.  
XX  
XX      07-DEC-2001; 2001US-00017621.  
XX      (ISIS-) ISIS PHARM INC.  
FA  
XX      Freier SM, Roach MP;  
PI  
XX      WPI; 2003-577271/54.  
DR  
XX      New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
PT      gene expression, particularly useful for treating hyperproliferative or  
PT      neurological disorders for example, mental retardation, or  
PT      thrombocytopoenia.  
XX  
PS      Claim 3; Page 74; 104pp; English.  
XX  
XX      The invention relates to antisense compounds, compositions and methods  
CC      for modulating the expression of PCTAIRE protein kinase 1 (also known as  
CC      PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for  
CC      treating an animal having a disease or condition associated with PCTAIRE  
CC      protein kinase 1, particularly a hyperproliferative disease or a  
CC      neurological disease. These diseases include thrombocytopoenia, mental  
CC      retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
CC      with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
CC      disease, or incontinentia pigmenti. The antisense oligonucleotide is  
CC      particularly useful for inhibiting the expression of PCTAIRE protein  
CC      kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
CC      or as research reagents or kits. The present sequence is an antisense  
CC      oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This  
CC      sequence is used to illustrate the method of the invention  
XX  
SQ      Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;  
  
Query Match      1.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 53;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
Qy      519 GAAGCTGACCTCAATAGCC 538  
Db      |||||  
20 GAAGCTGACCTCAATAGCC 1  
  
RESULT 47  
AAL61734/C  
ID      AAL61734 standard; DNA; 20 BP.  
XX  
XX      AAL61734;  
XX  
XX      22-SEP-2003 (first entry)  
DT  
XX      Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204171.  
DE  
XX      Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
KW      hyperproliferative disease; neurological disease; thrombocytopoenia;  
KW      retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
KW      mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
KW      PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
KW      antisense; ss.  
XX  
OS      Homo sapiens.  
OS      Synthetic.  
XX
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FH      Key      Location/Qualifiers  
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FT      /note= "Phosphorothioate backbone; All cytidines are 5-  
FT      methylcytidines"  
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FT      /*tag= b  
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FT      /note= "2'methoxyethyl nucleotides"  
FT      16..20  
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FT      /note= "2'methoxyethyl nucleotides"  
XX  
XX      WO2003049691-A2.  
FN  
XX      19-JUN-2003.  
PD  
XX  
XX      06-DEC-2002; 2002WO-US039138.  
XX  
XX      07-DEC-2001; 2001US-00017621.  
PR      (ISIS-) ISIS PHARM INC.  
FA  
XX      Freier SM, Roach MP;  
PI  
XX      WPI; 2003-577271/54.  
DR  
XX      New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
PT      gene expression, particularly useful for treating hyperproliferative or  
PT      neurological disorders for example, mental retardation, or  
PT      thrombocytopoenia.  
XX  
PS      Claim 3; Page 74; 104pp; English.  
XX  
XX      The invention relates to antisense compounds, compositions and methods  
CC      for modulating the expression of PCTAIRE protein kinase 1 (also known as  
CC      PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for  
CC      treating an animal having a disease or condition associated with PCTAIRE  
CC      protein kinase 1, particularly a hyperproliferative disease or a  
CC      neurological disease. These diseases include thrombocytopoenia, mental  
CC      retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
CC      with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
CC      disease, or incontinentia pigmenti. The antisense oligonucleotide is  
CC      particularly useful for inhibiting the expression of PCTAIRE protein  
CC      kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
CC      or as research reagents or kits. The present sequence is an antisense  
CC      oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This  
CC      sequence is used to illustrate the method of the invention  
XX  
SQ      Sequence 20 BP; 5 A; 5 C; 8 G; 2 T; 0 U; 0 Other;  
  
Query Match      1.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 53;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
Qy      566 GCCTCCGTCGTGCAGCCTA 595  
Db      |||||  
20 GCCTCCGTCGTGCAGCCTA 1  
  
RESULT 48  
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ID      AAL61739 standard; DNA; 20 BP.  
XX  
XX      AAL61739;  
XX  
XX      22-SEP-2003 (first entry)  
DT  
XX      Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204176.  
DE  
XX      Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
KW
```

KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
XX
XX Key Location/Qualifiers
FT modified_base 1. .20
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FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylcytidines"
FT modified_base 1. .5
FT /*tag= b
FT /mod_base= OTHER
FT modified_base 16. .20
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FT /note= "2'methoxyethyl nucleotides"
XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopaenia.
XX
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PCK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopaenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 3 A; 3 C; 7 G; 7 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred.No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 764 TGCTCAAGGACCTCAACAC 783
Db 20 TGCTCAAGGACCTCAACAC 1
RESULT 49
AAL61766/c

ID AAL61766 standard; DNA; 20 BP.
XX
XX AAL61766;
XX
XX 22-SEP-2003 (first entry)
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204203.
XX
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX
XX Key Location/Qualifiers
FT modified_base 1. .20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylcytidines"
FT modified_base 1. .5
FT /*tag= b
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FT modified_base 16. .20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopaenia.
XX
XX Claim 3; Page 75; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PCK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopaenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 6 A; 5 C; 8 G; 1 T; 0 U; 0 Other;
XX
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred.No. 53;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1543 GCCAGCCTTCGGTCTCGTC 1562
|||||

Db 20 GCCAGCCTTCGGTCTCGTC 1

RESULT 50
AAL61702/c
ID AAL61702 standard; DNA; 20 BP.

XX AAL61702;
XX
XX 22-SEP-2003 (first entry)
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204139.

XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.

XX Homo sapiens.
XX Synthetic.

XX
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylcytidines"
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FT /*tag= b
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FT /note= "2'methoxyethyl nucleotides"
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FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"

XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.

XX Example 15; Page 73; 104pp; English.

XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PCK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein

CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention

XX
XX SQ Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred.No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 48 ACCAGCAGTGTGACTGCTGA 67
|||||

Db 20 ACCAGCAGTGTGACTGCTGA 1

RESULT 51
AAL61705/c
ID AAL61705 standard; DNA; 20 BP.

XX AAL61705;
XX
XX 22-SEP-2003 (first entry)
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204142.

XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.

XX Homo sapiens.
XX Synthetic.

XX
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylcytidines"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /*tag= c
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FT /note= "2'methoxyethyl nucleotides"

XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.

XX Claim 3; Page 74; 104pp; English.

XX The invention relates to antisense compounds, compositions and methods

```

CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopaenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
SQ Sequence 20 BP; 3 A; 6 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 127 GATCGGATGAAGAGATCAA 146
DB 20 GATCGGATGAAGAGATCAA 1

RESULT 52
AAL61712/c
ID AAL61712 standard; DNA; 20 BP.
XX
AC AAL61712;
XX
DT 22-SEP-2003 (first entry)
XX
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204149.
XX
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylcytidines"
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX
PN WO2003049691-A2.
XX
PD 19-JUN-2003.
XX
PF 06-DEC-2002; 2002WO-US039138.
XX
PR 07-DEC-2001; 2001US-00017621.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Freier SM, Roach MP;
XX
WP1; 2003-577271/54.

```

```

XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopaenia.
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopaenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX
SQ Sequence 20 BP; 2 A; 6 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 181 GGCATAGACAAGACCAATGG 200
DB 20 GGCATAGACAAGACCAATGG 1

RESULT 53
AAL61736/c
ID AAL61736 standard; DNA; 20 BP.
XX
AC AAL61736;
XX
DT 22-SEP-2003 (first entry)
XX
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204173.
XX
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylcytidines"
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX
PN WO2003049691-A2.
XX
PD 19-JUN-2003.

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PF 06-DEC-2002; 2002WO-US039138.
XX
PR 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
PA
PI Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
DR
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopoenia.
XX
XX Example 15; Page 74; 104pp; English.
PS
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopoenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 4 A; 3 C; 5 G; 8 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 614 CCTACATTAAAGCTGGACAAA 633
Db 20 CCTACATTAAAGCTGGACAAA 1
RESULT 54
AAL61747/c
ID AAL61747 standard; DNA; 20 BP.
XX
XX AAL61747;
AC
XX
XX 22-SEP-2003 (first entry)
DT
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204184.
DE
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopoenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
XX Homo sapiens.
OS
XX Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= a
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FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylcytidines"
FT 1..5
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FT /mod_base= OTHER
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FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX
XX WO2003049691-A2.
PN
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Freier SM, Roach MP;
PI
XX
XX WPI; 2003-577271/54.
DR
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopoenia.
XX
XX Claim 3; Page 74; 104pp; English.
PS
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopoenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 5 A; 7 C; 6 G; 2 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1207 TTTCCGGGCTCCACGGTGA 1226
Db 20 TTTCCGGGCTCCACGGTGA 1
RESULT 55
AAL61761/c
ID AAL61761 standard; DNA; 20 BP.
XX
XX AAL61761;
AC
XX
XX 22-SEP-2003 (first entry)
DT
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204198.
DE
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopoenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
XX Homo sapiens.
OS
XX Synthetic.
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XX Key Location/Qualifiers
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XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX
XX Claim 3; Page 75; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 4 A; 4 C; 7 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 53;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1476 GCGGATCCCAAACTCTCTG 1495
XX |||||
XX 20 GCGGATCCCAAACTCTCTG 1
XX
XX
XX RESULT 56
XX AAL61710/c
XX ID AAL61710 standard; DNA; 20 BP.
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XX AC AAL61710;
XX
XX DT 22-SEP-2003 (first entry)
XX
XX DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204147.
XX
XX KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;

```

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KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.
XX
XX OS Homo sapiens.
XX OS Synthetic.
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XX FH Key Location/Qualifiers
XX modified_base 1..20
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XX methylcytidines"
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XX modified_base 16..20
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XX /note= "2'methoxyethyl nucleotides"
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XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 53;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 155 TGTCATGACACTCCGAGGT 174
XX |||||
XX 20 TGTCATGACACTCCGAGGT 1
XX
XX
XX RESULT 57
XX AAL61742/c
XX ID AAL61742 standard; DNA; 20 BP.

```


CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
SQ Sequence 20 BP; 2 A; 8 C; 3 G; 7 T; 0 U; 0 Other;
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 6 GCAGCGTAAGGATGGACAG 25
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DB 20 GCAGCGTAAGGATGGACAG 1
RESULT 59
AAL61699/c
ID AAL61699 standard; DNA; 20 BP.
XX
AC AAL61699;
XX
DT 22-SEP-2003 (first entry)
XX
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204136.
XX
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
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FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
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XX
PN WO2003049691-A2.
XX
PD 19-JUN-2003.
XX
PF 06-DEC-2002; 2002WO-US039138.
XX
PR 07-DEC-2001; 2001US-00017621.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Freier SM, Roach MP;
XX
DR WPI; 2003-577271/54.
XX
PT New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
PS Claim 3; Page 73; 104pp; English.
XX
CC The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as

CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
SQ Sequence 20 BP; 2 A; 8 C; 2 G; 8 T; 0 U; 0 Other;
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 14 AAGGATGGACAGGATGCAG 33
|||||
DB 20 AAGGATGGACAGGATGCAG 1
RESULT 60
AAL61709/c
ID AAL61709 standard; DNA; 20 BP.
XX
AC AAL61709;
XX
DT 22-SEP-2003 (first entry)
XX
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204146.
XX
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylethylenes"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX
PN WO2003049691-A2.
XX
PD 19-JUN-2003.
XX
PF 06-DEC-2002; 2002WO-US039138.
XX
PR 07-DEC-2001; 2001US-00017621.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Freier SM, Roach MP;
XX
DR WPI; 2003-577271/54.
XX

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PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
XX thrombocytopenia.

XX Claim 3; Page 74; 104pp; English.

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CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
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CC treating an animal having a disease or condition associated with PCTAIRE
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CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention

XX Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 149 GGCAGCTGTCATGACACTC 168
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DB 20 GGCAGCTGTCATGACACTC 1

RESULT 61
AAL61721/c
ID AAL61721 standard; DNA; 20 BP.

XX AAL61721;
XX 22-SEP-2003 (first entry)

XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204158.

XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.

XX Homo sapiens.
OS Synthetic.

XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylcytidines"
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"

XX WO2003049691-A2.
XX 19-JUN-2003.
XX 06-DEC-2002; 2002WO-US039138.

XX 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.

XX Freier SM, Roach MP;
XX WPI; 2003-577271/54.

XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.

XX Claim 3; Page 74; 104pp; English.

XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention

XX Sequence 20 BP; 6 A; 9 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 343 TTGAAGATGGGTCGTGATGG 362
|||||
DB 20 TTGAAGATGGGTCGTGATGG 1

RESULT 62
AAL61735/c
ID AAL61735 standard; DNA; 20 BP.

XX AAL61735;
XX 22-SEP-2003 (first entry)

XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204172.

XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.

XX Homo sapiens.
OS Synthetic.

XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylcytidines"
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20

FT FT /*tag= c
FT FT /mod_base= OTHER
XX XX /note= "2'methoxyethyl nucleotides"

PN W02003049691-A2.

XX 19-JUN-2003.

XX 06-DEC-2002; 2002WO-US039138.

XX 07-DEC-2001; 2001US-00017621.

XX (ISIS-) ISIS PHARM INC.

XX Freier SM, Roach MP;

XX WPI; 2003-577271/54.

XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT Gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.

PS Claim 3; Page 74; 104pp; English.

XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention

XX Sequence 20 BP; 4 A; 4 C; 5 G; 7 T; 0 U; 0 Other;

XX Query Match 1.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 53;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 606 ACTGGAGACCTACATTAGC 625

DB 20 ACTGGAGACCTACATTAGC 1

RESULT 63

AAL61746/c

ID AAL61746 standard; DNA; 20 BP.

XX AAL61746;

XX 22-SEP-2003 (first entry)

XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204183.

XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.

XX Homo sapiens.

OS Synthetic.

XX Key Location/Qualifiers

PH modified_base 1..20

FT FT /*tag= a
FT FT /mod_base= OTHER
XX XX /note= "Phosphorothioate backbone; All cytidines are 5-
XX methylecytidines"

XX modified_base 1..5

XX /*tag= b

XX /mod_base= OTHER

XX /note= "2'methoxyethyl nucleotides"

XX /*tag= c

XX /mod_base= OTHER

XX /note= "2'methoxyethyl nucleotides"

PN W02003049691-A2.

XX 19-JUN-2003.

XX 06-DEC-2002; 2002WO-US039138.

XX 07-DEC-2001; 2001US-00017621.

XX (ISIS-) ISIS PHARM INC.

XX Freier SM, Roach MP;

XX WPI; 2003-577271/54.

XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1

XX Gene expression, particularly useful for treating hyperproliferative or

XX neurological disorders for example, mental retardation, or

XX thrombocytopenia.

XX Claim 3; Page 74; 104pp; English.

XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention

XX Sequence 20 BP; 5 A; 6 C; 6 G; 3 T; 0 U; 0 Other;

XX Query Match 1.1%; Score 20; DB 1; Length 20;

XX Best Local Similarity 100.0%; Pred. No. 53;

XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1121 TGCTTGGGTCCACGGACTAC 1140

DB 20 TGCTTGGGTCCACGGACTAC 1

RESULT 64

AAL61763/c

ID AAL61763 standard; DNA; 20 BP.

XX AAL61763;

XX 22-SEP-2003 (first entry)

XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204200.

XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;

XX hyperproliferative disease; neurological disease; thrombocytopenia;

XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;

KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.
OS Homo sapiens.
XX Synthetic.
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylcytidines"
FT 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX WO2003049691-A2.
XX 19-JUN-2003.
XX 06-DEC-2002; 2002WO-US039138.
XX 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
XX Freier SM, Roach MP;
XX WPI; 2003-577271/54.
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX Claim 3; Page 75; 104pp; English.
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
SQ Sequence 20 BP; 7 A; 1 C; 7 G; 5 T; 0 U; 0 Other;
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1490 TTCCTGACACTACTTCCATA 1509
Db ||||||||||||||||
20 TTCCTGACACTACTTCCATA 1

RESULT 65
AAL61730/c
ID AAL61730 standard; DNA; 20 BP.
XX

AC AAL61730;
XX 22-SEP-2003 (first entry)
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204167.
DE
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylcytidines"
FT 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX WO2003049691-A2.
XX 19-JUN-2003.
XX 06-DEC-2002; 2002WO-US039138.
XX 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
XX Freier SM, Roach MP;
XX WPI; 2003-577271/54.
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX Claim 3; Page 74; 104pp; English.
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
SQ Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 493 ATCCGCTGCTGAGGGCTA 512
DB 20 ATCCGCTGCTGAGGGCTA 1

RESULT 66

AAL61731/c
ID AAL61731 standard; DNA; 20 BP.

XX AC AAL61731;
XX DT 22-SEP-2003 (first entry)
XX DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204168.

XX KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX KW hyperproliferative disease; neurological disease; thrombocytopaenia;
XX KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX KW PTK1; crk5; incontinencia pigmenti; phosphorothioate backbone;
XX KW antisense; ss.
XX OS Homo sapiens.
XX OS Synthetic.

XX FH Key Location/Qualifiers

XX FT modified_base 1..20
XX FT /tag= a
XX FT /mod_base= OTHER
XX FT /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"
XX FT modified_base 1..5
XX FT /tag= b
XX FT /mod_base= OTHER
XX FT /note= "2'methoxyethyl nucleotides"
XX FT modified_base 16..20
XX FT /tag= c
XX FT /mod_base= OTHER
XX FT /note= "2'methoxyethyl nucleotides"

WO2003049691-A2.

19-JUN-2003.

06-DEC-2002; 2002WO-US039138.

07-DEC-2001; 2001US-00017621.

(ISIS-) ISIS PHARM INC.

Freier SM, Roach MP;

WPI; 2003-577271/54.

XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.

XX Claim 3; Page 74; 104pp; English.

XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopaenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinencia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense

CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX SQ Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 499 CTGCTGAGGCTACCTGGA 518
DB 20 CTGCTGAGGCTACCTGGA 1

RESULT 67

AAL61751/c
ID AAL61751 standard; DNA; 20 BP.

XX AC AAL61751;

XX DT 22-SEP-2003 (first entry)

XX DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204188.

XX KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX KW hyperproliferative disease; neurological disease; thrombocytopaenia;
XX KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX KW PTK1; crk5; incontinencia pigmenti; phosphorothioate backbone;
XX KW antisense; ss.

XX OS Homo sapiens.
XX OS Synthetic.

XX FH Key Location/Qualifiers

XX FT modified_base 1..20
XX FT /tag= a
XX FT /mod_base= OTHER
XX FT /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"
XX FT modified_base 1..5
XX FT /tag= b
XX FT /mod_base= OTHER
XX FT /note= "2'methoxyethyl nucleotides"
XX FT modified_base 16..20
XX FT /tag= c
XX FT /mod_base= OTHER
XX FT /note= "2'methoxyethyl nucleotides"

WO2003049691-A2.

19-JUN-2003.

06-DEC-2002; 2002WO-US039138.

07-DEC-2001; 2001US-00017621.

(ISIS-) ISIS PHARM INC.

Freier SM, Roach MP;

WPI; 2003-577271/54.

XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.

XX Claim 3; Page 74; 104pp; English.

XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for

CC treating an animal having a disease or condition associated with PCTAIRE
 CC protein kinase 1, particularly a hyperproliferative disease or a
 CC neurological disease. These diseases include thrombocytopaenia, mental
 CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
 CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
 CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
 CC particularly useful for inhibiting the expression of PCTAIRE protein
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
 CC or as research reagents or kits. The present sequence is an antisense
 CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
 CC sequence is used to illustrate the method of the invention
 XX
 XX Sequence 20 BP; 3 A; 6 C; 6 G; 5 T; 0 U; 0 Other;
 SQ

Query Match 1.1%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 53;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1284 AGGCATCCTGTCACACGAGG 1303
 Db 20 AGGCATCCTGTCACACGAGG 1

RESULT 68
 AAL61752/c
 ID AAL61752 standard; DNA; 20 BP.
 XX
 AC AAL61752;
 XX
 XX 22-SEP-2003 (first entry)
 XX
 XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204189.
 XX
 XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
 XX hyperproliferative disease; neurological disease; thrombocytopaenia;
 XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
 XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
 XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
 XX antisense; ss.
 XX
 XX Homo sapiens.
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FH modified_base 1..20
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone; All cytidines are 5-
 FT methycytidines"
 FT modified_base 1..5
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "2'methoxyethyl nucleotides"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'methoxyethyl nucleotides"
 XX
 XX WO2003049691-A2.
 XX
 XX 19-JUN-2003.
 XX
 XX 06-DEC-2002; 2002WO-US039138.
 XX
 XX 07-DEC-2001; 2001US-00017621.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Preier SM, Roach WP;
 XX
 XX WPI; 2003-577271/54.
 XX
 XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1

PT gene expression, particularly useful for treating hyperproliferative or
 PT neurological disorders for example, mental retardation, or
 XX thrombocytopaenia.
 XX
 XX Claim 3; Page 74; 104pp; English.
 XX
 XX The invention relates to antisense compounds, compositions and methods
 CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
 CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
 CC treating an animal having a disease or condition associated with PCTAIRE
 CC protein kinase 1, particularly a hyperproliferative disease or a
 CC neurological disease. These diseases include thrombocytopaenia, mental
 CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
 CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
 CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
 CC particularly useful for inhibiting the expression of PCTAIRE protein
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
 CC or as research reagents or kits. The present sequence is an antisense
 CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
 CC sequence is used to illustrate the method of the invention
 XX
 XX Sequence 20 BP; 1 A; 6 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 53;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1326 CAAGTACCGAGCGGAGGCC 1345
 Db 20 CAAGTACCGAGCGGAGGCC 1

RESULT 69
 AAL61775/c
 ID AAL61775 standard; DNA; 20 BP.
 XX
 AC AAL61775;
 XX
 XX 22-SEP-2003 (first entry)
 XX
 XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204212.
 XX
 XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
 XX hyperproliferative disease; neurological disease; thrombocytopaenia;
 XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
 XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
 XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
 XX antisense; ss.
 XX
 XX Homo sapiens.
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FH modified_base 1..20
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone; All cytidines are 5-
 FT methycytidines"
 FT modified_base 1..5
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "2'methoxyethyl nucleotides"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'methoxyethyl nucleotides"
 XX
 XX WO2003049691-A2.
 XX
 XX 19-JUN-2003.
 XX
 XX 06-DEC-2002; 2002WO-US039138.
 XX
 XX

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PR 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
XX Freier SM, Roach MP;
XX WPI; 2003-577271/54.
DR
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Claim 3; Page 75; 104pp; English.
PS
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
SQ Sequence 20 BP; 4 A; 4 C; 8 G; 4 T; 0 U; 0 Other;
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1719 GAGCCATGTTACCTGCCCA 1738
Db 20 GAGCCATGTTACCTGCCCA 1
RESULT 70
AAL61708/c
ID AAL61708 standard; DNA; 20 BP.
XX
AC AAL61708;
XX
XX 22-SEP-2003 (first entry)
XX
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204145.
XX
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl nucleotides"
FT modified_base 16..20
FT /*tag= c
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FT /mod_base= OTHER
FT /note= "2'-methoxyethyl nucleotides"
XX
XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.
PS
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
SQ Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 143 TCAACGGCAGCTGTCAATG 162
Db 20 TCAACGGCAGCTGTCAATG 1
RESULT 71
AAL61717/c
ID AAL61717 standard; DNA; 20 BP.
XX
AC AAL61717;
XX
XX 22-SEP-2003 (first entry)
XX
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204154.
XX
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
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FT FT /mod_base= OTHER
FT FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT FT methylcytidines"
FT FT 1..5
FT FT /*tag= b
FT FT /mod_base= OTHER
FT FT /note= "2'methoxyethyl nucleotides"
FT FT 16..20
FT FT /*tag= c
FT FT /mod_base= OTHER
FT FT /note= "2'methoxyethyl nucleotides"
XX XX WO2003049691-A2.
XX XX 19-JUN-2003.
XX XX 06-DEC-2002; 2002WO-US039138.
XX XX 07-DEC-2001; 2001US-00017621.
XX XX (ISIS-) ISIS PHARM INC.
XX XX Freier SM, Roach MP;
XX XX WPI; 2003-577271/54.
XX XX
XX XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT PT gene expression, particularly useful for treating hyperproliferative or
PT PT neurological disorders for example, mental retardation, or
PT PT thrombocytopenia.
XX XX Claim 3; Page 74; 104pp; English.
XX XX
XX XX The invention relates to antisense compounds, compositions and methods
CC CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC CC treating an animal having a disease or condition associated with PCTAIRE
CC CC protein kinase 1, particularly a hyperproliferative disease or a
CC CC neurological disease. These diseases include thrombocytopenia, mental
CC CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC CC or as research reagents or kits. The present sequence is an antisense
CC CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC CC sequence is used to illustrate the method of the invention
XX XX
SQ Sequence 20 BP; 3 A; 5 C; 9 G; 3 T; 0 U; 0 Other;
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 303 GGGCCCACTCAGCTCTGCAC 322
DB 20 GGGCCCACTCAGCTCTGCAC 1
|||||
RESULT 72
AAL61722/c
ID AAL61722 standard; DNA; 20 BP.
XX
XX AAL61722;
XX
XX 22-SEP-2003 (first entry)
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204159.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX

```

```

KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT FT methylcytidines"
FT FT 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT FT 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX XX WO2003049691-A2.
XX XX 19-JUN-2003.
XX XX 06-DEC-2002; 2002WO-US039138.
XX XX 07-DEC-2001; 2001US-00017621.
XX XX (ISIS-) ISIS PHARM INC.
XX XX Freier SM, Roach MP;
XX XX WPI; 2003-577271/54.
XX XX
XX XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT PT gene expression, particularly useful for treating hyperproliferative or
PT PT neurological disorders for example, mental retardation, or
PT PT thrombocytopenia.
XX XX Claim 3; Page 74; 104pp; English.
XX XX
XX XX The invention relates to antisense compounds, compositions and methods
CC CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC CC treating an animal having a disease or condition associated with PCTAIRE
CC CC protein kinase 1, particularly a hyperproliferative disease or a
CC CC neurological disease. These diseases include thrombocytopenia, mental
CC CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC CC or as research reagents or kits. The present sequence is an antisense
CC CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC CC sequence is used to illustrate the method of the invention
XX XX
SQ Sequence 20 BP; 3 A; 5 C; 8 G; 4 T; 0 U; 0 Other;
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 370 GACCAGGCTTCAGCCAGTC 389
DB 20 GACCAGGCTTCAGCCAGTC 1
|||||
RESULT 73
AAL61725/c
ID AAL61725 standard; DNA; 20 BP.
XX
XX AAL61725;
XX

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Db	20	AGAGTGGGTATGCCACCA	1
RESULT 74			
AAAL61744/c			
ID	AAAL61744	standard; DNA; 20 BP.	
XX			
AC	AAAL61744;		
XX			
DT	22-SEP-2003	(first entry)	
XX			
DE	Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204181.		
XX			
KW	Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTK1; crks; incontinentia pigmenti; phosphorothioate backbone; antisense; ss.		
XX			
OS	Homo sapiens.		
OS	Synthetic.		
XX			
FH	Key	Location/Qualifiers	
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FT		/note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"	
FT	modified_base	1..5	
FT		/*tag= b	
FT		/mod_base= OTHER	
FT		/note= "2'methoxyethyl nucleotides"	
FT	modified_base	16..20	
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FT		/note= "2'methoxyethyl nucleotides"	
XX			
PN	WO2003049691-A2.		
XX			
PD	19-JUN-2003.		
XX			
PF	06-DEC-2002; 2002WO-US039138.		
XX			
PR	07-DEC-2001; 2001US-00017621.		
XX			
PA	(ISIS-) ISIS PHARM INC.		
XX			
FI	Freier SM, Roach MP;		
XX			
DR	WPI; 2003-577271/54.		
XX			
PT	New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or thrombocytopenia.		
PT			
PT			
PT			
XX			
PS	Claim 3; Page 74; 104pp; English.		
XX			
CC	The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis or as research reagents or kits. The present sequence is an antisense oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This		

CC sequence is used to illustrate the method of the invention
XX
SQ Sequence 20 BP; 3 A; 5 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 966 GGTGCTACACCGAGACTCA 985
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Db 20 GGTGCTACACCGAGACTCA 1

RESULT 75
AAL61762/c
ID AAL61762 standard; DNA; 20 BP.

XX AAL61762;

XX 22-SEP-2003 (first entry)

XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204199.

XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.

XX Homo sapiens.
OS Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone; All cytidines are 5-methylcytidines"

FT modified_base 1..5

FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"

FT modified_base 16..20

FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"

XX WO2003049691-A2.

XX 19-JUN-2003.

XX 06-DEC-2002; 2002WO-US039138.

XX 07-DEC-2001; 2001US-00017621.

XX (ISIS-) ISIS PHARM INC.

XX Freier SM, Roach MP;

XX WPI; 2003-577271/54.

XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopaenia.

XX Claim 3; Page 75; 104pp; English.

XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE

CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopaenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention

XX SQ Sequence 20 BP; 4 A; 1 C; 8 G; 7 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1480 ATCCACAACTTCCTGACAC 1499
|||||||
Db 20 ATCCACAACTTCCTGACAC 1

RESULT 76

AAL61703/c

ID AAL61703 standard; DNA; 20 BP.

XX AAL61703;

XX 22-SEP-2003 (first entry)

XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204140.

XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.

XX Homo sapiens.

OS Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..20

FT /*tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone; All cytidines are 5-methylcytidines"

FT modified_base 1..5

FT /*tag= b

FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"

FT modified_base 16..20

FT /*tag= c

FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"

XX WO2003049691-A2.

XX 19-JUN-2003.

XX 06-DEC-2002; 2002WO-US039138.

XX 07-DEC-2001; 2001US-00017621.

XX (ISIS-) ISIS PHARM INC.

XX Freier SM, Roach MP;

XX WPI; 2003-577271/54.

XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT gene expression, particularly useful for treating hyperproliferative or

PT neurological disorders for example, mental retardation, or
 PT thrombocytopenia.

PS Example 15; Page 73; 104pp; English.

XX The invention relates to antisense compounds, compositions and methods
 CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
 CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
 CC treating an animal having a disease or condition associated with PCTAIRE
 CC protein kinase 1, particularly a hyperproliferative disease or a
 CC neurological disease. These diseases include thrombocytopenia, mental
 CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
 CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
 CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
 CC particularly useful for inhibiting the expression of PCTAIRE protein
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
 CC or as research reagents or kits. The present sequence is an antisense
 CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
 CC sequence is used to illustrate the method of the invention

XX Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 53;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 56 TGTGACTGCTGAACCCAGG 75
 Db 20 TGTGACTGCTGAACCCAGG 1

RESULT 77

AAL61711/c

ID AAL61711 standard; DNA; 20 BP.

XX AAL61711;

XX 22-SEP-2003 (first entry)

XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204148.

XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
 KW hyperproliferative disease; neurological disease; thrombocytopenia;
 KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
 KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
 KW antisense; ss.

XX Homo sapiens.

OS Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..20
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone; All cytidines are 5-
 FT methylcytidines"

FT modified_base 1..5

FT /tag= b
 FT /mod_base= OTHER
 FT /note= "2-methoxyethyl nucleotides"

FT modified_base 16..20
 FT /tag= c
 FT /mod_base= OTHER
 FT /note= "2-methoxyethyl nucleotides"

XX WO2003049691-A2.

XX 19-JUN-2003.

XX 06-DEC-2002; 2002WO-US039138.

XX 07-DEC-2001; 2001US-00017621.

XX (ISIS-) ISIS PHARM INC.

XX Freier SM, Roach MP;

XX WPI; 2003-577271/54.

XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
 CC gene expression, particularly useful for treating hyperproliferative or
 CC neurological disorders for example, mental retardation, or
 CC thrombocytopenia.

XX Claim 3; Page 74; 104pp; English.

XX The invention relates to antisense compounds, compositions and methods
 CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
 CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
 CC treating an animal having a disease or condition associated with PCTAIRE
 CC protein kinase 1, particularly a hyperproliferative disease or a
 CC neurological disease. These diseases include thrombocytopenia, mental
 CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
 CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
 CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
 CC particularly useful for inhibiting the expression of PCTAIRE protein
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
 CC or as research reagents or kits. The present sequence is an antisense
 CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
 CC sequence is used to illustrate the method of the invention

XX Sequence 20 BP; 2 A; 9 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 53;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 169 CGAGGTGGCCGAGGCATAGA 188

Db 20 CGAGGTGGCCGAGGCATAGA 1

RESULT 78

AAL61716/c

ID AAL61716 standard; DNA; 20 BP.

XX AAL61716;

XX 22-SEP-2003 (first entry)

XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204153.

XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
 KW hyperproliferative disease; neurological disease; thrombocytopenia;
 KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
 KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
 KW antisense; ss.

XX Homo sapiens.

OS Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..20
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone; All cytidines are 5-
 FT methylcytidines"

FT modified_base 1..5

FT /tag= b
 FT /mod_base= OTHER
 FT /note= "2-methoxyethyl nucleotides"

FT modified_base 16..20

FT /tag= c
 FT /mod_base= OTHER


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FT /note= "2'methoxyethyl nucleotides"
XX
PN WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 3 A; 5 C; 9 G; 3 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 299 CACGGGGCCACTCAGCTCT 318
DB 20 CACGGGGCCACTCAGCTCT 1
RESULT 79
AAL61719/c
ID AAL61719 standard; DNA; 20 BP.
XX
XX AAL61719;
XX
XX 22-SEP-2003 (first entry)
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204156.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= a
FT /mod_base= OTHER

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FT /note= "Phosphorothioate backbone; All cytidines are 5-
XX methycytidines"
XX
XX modified_base 1..5
XX /tag= b
XX /mod_base= OTHER
XX /note= "2'methoxyethyl nucleotides"
XX
XX modified_base 16..20
XX /tag= c
XX /mod_base= OTHER
XX /note= "2'methoxyethyl nucleotides"
XX
XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 4 A; 7 C; 3 G; 6 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 331 GTGCACGAGGACTTGAAGAT 350
DB 20 GTGCACGAGGACTTGAAGAT 1
RESULT 80
AAL61769/c
ID AAL61769 standard; DNA; 20 BP.
XX
XX AAL61769;
XX
XX 22-SEP-2003 (first entry)
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204206.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;

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KW antisense; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"
 FT modified_base 1..5
 FT /*tag= b
 FT /mod_base= OTHER
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'methoxyethyl nucleotides"
 XX
 FN WO2003049691-A2.
 XX
 XX 19-JUN-2003.
 XX
 XX 06-DEC-2002; 2002WO-US039138.
 XX
 XX 07-DEC-2001; 2001US-00017621.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Freier SM, Roach MP;
 XX WPI; 2003-577271/54.
 DR
 XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
 PT Gene expression, particularly useful for treating hyperproliferative or
 PT neurological disorders for example, mental retardation, or
 PT thrombocytopenia.
 XX
 XX Claim 3; Page 75; 104pp; English.
 PS
 CC The invention relates to antisense compounds, compositions and methods
 CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
 CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
 CC treating an animal having a disease or condition associated with PCTAIRE
 CC protein kinase 1, particularly a hyperproliferative disease or a
 CC neurological disease. These diseases include thrombocytopenia, mental
 CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
 CC with parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
 CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
 CC particularly useful for inhibiting the expression of PCTAIRE protein
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
 CC or as research reagents or kits. The present sequence is an antisense
 CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
 CC sequence is used to illustrate the method of the invention
 XX
 XX Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 1.1%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 53;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1563 GATGCTGACTCAGGCAGGC 1582
 DB 20 GATGCTGACTCAGGCAGGC 1
 ||||||||||||||||||
 RESULT 81
 AAL61774/c
 ID AAL61774 standard; DNA; 20 BP.
 XX
 AC AAL61774;
 XX

DT 22-SEP-2003 (first entry)
 XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204211.
 DE
 XX
 KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
 KW hyperproliferative disease; neurological disease; thrombocytopenia;
 KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; parkinsonism;
 KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
 KW antisense; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"
 FT modified_base 1..5
 FT /*tag= b
 FT /mod_base= OTHER
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'methoxyethyl nucleotides"
 XX
 FN WO2003049691-A2.
 XX
 XX 19-JUN-2003.
 PD
 XX
 XX 06-DEC-2002; 2002WO-US039138.
 XX
 XX 07-DEC-2001; 2001US-00017621.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Freier SM, Roach MP;
 XX WPI; 2003-577271/54.
 DR
 XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
 PT Gene expression, particularly useful for treating hyperproliferative or
 PT neurological disorders for example, mental retardation, or
 PT thrombocytopenia.
 XX
 XX Claim 3; Page 75; 104pp; English.
 PS
 CC The invention relates to antisense compounds, compositions and methods
 CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
 CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
 CC treating an animal having a disease or condition associated with PCTAIRE
 CC protein kinase 1, particularly a hyperproliferative disease or a
 CC neurological disease. These diseases include thrombocytopenia, mental
 CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
 CC with parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
 CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
 CC particularly useful for inhibiting the expression of PCTAIRE protein
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
 CC or as research reagents or kits. The present sequence is an antisense
 CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
 CC sequence is used to illustrate the method of the invention
 XX
 XX Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 1.1%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 53;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1715 GCTGAGCCATGTCACCTG 1734
 ||||||||||||||||||

Db 20 GCCTGAGCCATGTTCCACCTG 1

RESULT 82

AAL61713/c
ID AAL61713 standard; DNA; 20 BP.

XX AC AAL61713;
XX DT 22-SEP-2003 (first entry)
XX DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204150.

XX KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.

XX OS Homo sapiens.

OS Synthetic.

PH Key Location/Qualifiers

FT modified_base 1..20

FT /*tag= a

FT /mod_base= OTHER

FT /note= "Phosphorothioate backbone; All cytidines are 5-

FT methylcytidines"

FT modified_base 1..5

FT /*tag= b

FT /mod_base= OTHER

FT modified_base 16..20

FT /*tag= c

FT /mod_base= OTHER

FT /note= "2'methoxyethyl nucleotides"

XX WO2003049691-A2.

XX 19-JUN-2003.

XX 06-DEC-2002; 2002WO-US039138.

XX 07-DEC-2001; 2001US-00017621.

XX (ISIS-) ISIS PHARM INC.

XX Freier SM, Roach MP;

XX WPI; 2003-577271/54.

XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1

XX Gene expression, particularly useful for treating hyperproliferative or

XX neurological disorders for example, mental retardation, or

XX thrombocytopenia.

XX Claim 3; Page 74; 104pp; English.

XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention

XX SQ Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred.No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 269 CACGTGCTGCTCCTGGGAA 288

DB 20 CACGTGCTGCTCCTGGGAA 1

RESULT 83

AAL61738/c

ID AAL61738 standard; DNA; 20 BP.

XX AC AAL61738;

XX DT 22-SEP-2003 (first entry)

XX DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204175.

XX KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.

XX OS Homo sapiens.

OS Synthetic.

PH Key Location/Qualifiers

FT modified_base 1..20

FT /*tag= a

FT /mod_base= OTHER

FT /note= "Phosphorothioate backbone; All cytidines are 5-

FT methylcytidines"

FT modified_base 1..5

FT /*tag= b

FT /mod_base= OTHER

FT modified_base 16..20

FT /*tag= c

FT /mod_base= OTHER

FT /note= "2'methoxyethyl nucleotides"

XX WO2003049691-A2.

XX 19-JUN-2003.

XX 06-DEC-2002; 2002WO-US039138.

XX 07-DEC-2001; 2001US-00017621.

XX (ISIS-) ISIS PHARM INC.

XX Freier SM, Roach MP;

XX WPI; 2003-577271/54.

XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.

XX Claim 3; Page 74; 104pp; English.

XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a

CC neurological disease. These diseases include thrombocytopaenia, mental
 CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
 CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
 CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
 CC particularly useful for inhibiting the expression of PCTAIRE protein
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
 CC or as research reagents or kits. The present sequence is an antisense
 CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
 CC sequence is used to illustrate the method of the invention

XX
 SQ Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 53;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 693 TGTGGCACTCAAGGAGATCA 712
 DB 20 TGTGGCACTCAAGGAGATCA 1

RESULT 84
 AAL61743/c
 ID AAL61743 standard; DNA; 20 BP.
 AC AAL61743;
 DT 22-SEP-2003 (first entry)
 DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204180.
 KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
 KW hyperproliferative disease; neurological disease; thrombocytopaenia;
 KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
 KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
 KW antisense; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.

PH Key Location/Qualifiers
 FT modified_base 1..20
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"
 FT modified_base 1..5
 FT /tag= b
 FT /mod_base= OTHER
 FT /note= "2'methoxyethyl nucleotides"
 FT modified_base 16..20
 FT /tag= c
 FT /mod_base= OTHER
 FT /note= "2'methoxyethyl nucleotides"
 XX
 PN WO2003049691-A2.
 PD 19-JUN-2003.
 XX
 PF 06-DEC-2002; 2002WO-US039138.
 XX
 PR 07-DEC-2001; 2001US-00017621.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Freier SM, Roach MP;
 XX
 DR WPI; 2003-577271/54.
 XX
 PT New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
 PT gene expression, particularly useful for treating hyperproliferative or
 PT neurological disorders for example, mental retardation, or

PT thrombocytopaenia.
 XX Claim 3; Page 74; 104pp; English.
 PS
 CC The invention relates to antisense compounds, compositions and methods
 CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
 CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
 CC treating an animal having a disease or condition associated with PCTAIRE
 CC protein kinase 1, particularly a hyperproliferative disease or a
 CC neurological disease. These diseases include thrombocytopaenia, mental
 CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
 CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
 CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
 CC particularly useful for inhibiting the expression of PCTAIRE protein
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
 CC or as research reagents or kits. The present sequence is an antisense
 CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
 CC sequence is used to illustrate the method of the invention

XX
 SQ Sequence 20 BP; 2 A; 7 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 53;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 958 CGCAGAGAGGTGCTACACCG 977
 DB 20 CGCAGAGAGGTGCTACACCG 1

RESULT 85
 AC151216/c
 ID AC151216 standard; DNA; 25 BP.
 XX
 AC AC151216;
 XX
 DT 13-OCT-2003 (first entry)
 XX
 DE Human microarray DNA oligonucleotide SEQ ID NO 51207.
 XX
 KW EST; ss; probe; expressed sequence tag; microarray; gene expression;
 KW genetic variation; diallelic marker; polymorphism; human;
 KW cross-species comparison.
 XX
 OS Homo sapiens.
 XX
 PN US2003104410-A1.
 XX
 PD 05-JUN-2003.
 XX
 PF 15-MAR-2002; 2002US-00098263.
 XX
 PR 16-MAR-2001; 2001US-0276759P.
 XX
 PA (AFFY-) AFFYMETRIX INC.
 XX
 PI Mittmann MP;
 XX
 DR WPI; 2003-567953/53.
 XX
 PT New array of nucleic acid probes, useful for in situ hybridization, in
 PT Southern, Northern or dot-blot hybridization to identify or detect the
 PT sequence or specific mutations of any gene.
 XX
 PS Claim 1; SEQ ID NO 51207; 9pp; English.
 XX
 CC The invention discloses a microarray comprising a plurality of nucleic
 CC acid probes including one of 2,018,500 fully defined sequences, or its
 CC perfect match, perfect mismatch, antisense match or antisense mismatch.
 CC Also disclosed is a method of gene expression analysis. The array is used
 CC in monitoring gene expression levels by hybridisation to a DNA library,
 CC in analysis of genetic variation or in hybridisation of tag-labelled
 CC compounds. The nucleic acid probes are specifically designed for analysis

CC nucleic acid probes and detecting the hybridisation. The nucleic acid
 CC probes are attached to a solid support. The analysis comprises monitoring
 CC gene expression levels, identifying allelic markers or polymorphisms,
 CC or family members of a gene and a cross-species comparison. Each of the
 CC nucleic acids further comprises a tag sequence. The array of nucleic acid
 CC probes is useful in situ hybridisation, in Southern, Northern or dot-
 CC blot hybridisation to identify or detect the sequence or specific
 CC mutations of any gene, in mapping the 5' termini of mRNA molecules by
 CC primer extensions or in screening cDNA or genomic libraries or subclones
 CC for additional subclones containing segments of DNA that have been
 CC isolated and previously sequenced, the sequence presented is one of the
 CC nucleic acid probes incorporated in the microarray. Note: the sequence
 CC data for this patent can also be obtained in electronic format directly
 CC from USPTO at seqdata.uspto.gov/sequence.html
 XX
 SQ Sequence 25 BP; 4 A; 8 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 1.1%; Score 19.2; DB 1; Length 25;
Best Local Similarity 87.5%; Pred. No. 99;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 686 ACAACCTTGTGGCACTCAAGGAGA 709
|||
Db 25 ACAACCTTGTGGAACTGGAGGAGA 2

AAZ29517
ID AAZ29517 standard; DNA; 29 BP.

XX	ACI51217;
AC	
XX	
DT	13-OCT-2003 (first entry)

Inducible promoter; Thaumatin-like PR-5 related gene; AOPRT-L; primer;
KW
KW non-phytoxic inducing agent; Salicylic acid; SA; BTH; environmental;
KW
KW developmental; GUS construct; multimerisation; SA responsive element;
KW
KW systemic activation; Inverse PCR; IPCR; ss.

XX	Novel promoters used to control the expression of heterologous genes in transformed plants.
PT	
PT	

The present DNA sequence is a PCR primer-2, used for the identification CC
CC and multimerisation of a salicylic acid, SA/BTH responsive element in the CC
CC AoPR1-L promoter region. This primer is designed to regions of AoPR1-L CC
CC promoter and used along with PCR primer-4 for the construction of GUS CC
CC fusion constructs

Sequence 29 BP: 10 A: 6 C: 6 G: 7 T: 0 U: 0 Other:

```
Query Match      1.1%; Score 19.2; DB 1; Length 29;
Best Local Similarity 87.5%; Pred. No. 1.2e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0
```


(IMMU-) IMMUSOL INC.
Robbins JM, Tritz R;
WPI; 2001-300427/31.
Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
Example 1; Page 105; 408pp; English.
The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (I) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antiproliferative, dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling, ophthalmological, vulvular, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity, and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57577 to AAH62099 represent sequences used in the exemplification of the present invention
Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
Query Match 1.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred.No. 79;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0
QY 1029 GGCTGACTTTGGCCTGGCC 1047
DB 1 GGCTGACTTTGGCCTGGCC 19
RESULT 91
AAH58040
ID ID AAH58040 standard; DNA; 19 BP.
AC AAH58040;
XX
XX 10-SEP-2001 (first entry)
XX
XX Cell-cycle dependent kinase cdk4 ribozyme binding site SEQ ID NO:464.
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX recognition site; target; ribozyme binding site; eye disease; vulvular;
XX proliferative disease; skin disease; psoriasis; diabetic retinopathy;
XX cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
XX matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
XX antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;
XX antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
XX atopic dermatitis; actinic keratosis; squamous cell carcinoma;
XX basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
XX sickle cell retinopathy; ss.
XX Homo sapiens.
OS Synthetic.
OS
XX
XX W0200130362-A2.
XX
XX 03-MAY-2001.
XX
XX 26-OCT-2000; 2000WO-US029500.
XX
XX

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26-OCT-1999; 99US-0161532P.
(IMMU-) IMMUSOL INC.
Robbins JM, Tritz R;
WPI; 2001-300427/31.

Treating proliferative skin or eye diseases and scarring, using ribozymes
that cleave RNA encoding cytokines involved in inflammation, matrix
metalloproteinases, growth factors and cell-cycle dependent kinases.

Example 1; Page 105; 408pp; English.

The present invention describes a method for treating a proliferative
skin or eye disease and scarring. The method involves administering a
ribozyme (I) which cleaves RNA encoding a cytokine involved in
inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
dependent kinase, growth factor or a reductase, or administering a
nucleic acid molecule (II) comprising a promoter operably linked to a
nucleic acid segment encoding (I). (I) can have antiproliferative
dermatological, cytostatic, antiseborrheic, antidiabetic, antiskinning,
ophthalmological, vulnary, keratolytic and virucide activities, and
cleaves RNA encoding cytokine involved in inflammation. (I) can be used
in gene therapy. (I) and (II) are useful for treating proliferative skin
diseases such as psoriasis, atopic dermatitis, actinic keratosis,
squamous or basal cell carcinoma and viral or seborrheic wart. They can
also be used for treating proliferative eye diseases such as diabetic
retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
prematurity and retinal detachment, and for treating and preventing
scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
scar. AAH57577 to AAH62099 represent sequences used in the
exemplification of the present invention

Sequence 19 BP; 1 A; 5 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 1.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred.No.79;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0

Qy 1028 TGGCTGACTTTGGCGCTGCG 1046
Db 1 TGGCTGACTTTGGCGCTGCG 19

RESULT 92
AAL61694
ID AAL61694 standard; DNA; 19 BP.
AC AAL61694;
XX
XX
XX
XX 22-SEP-2003 (first entry)
XX
XX Human PCTAIRE protein kinase 1 DNA specific PCR probe.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopaenia;
XX retinitis pigmentosa; x-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PCKK; crk5; incontinentia pigmenti; PCR; probe; ss.
XX
XX Homo sapiens.
XX
XX
XX Key Location/Qualifiers
FH modified_base 1
FT FT /*tag= a
FT FT /mod_base= OTHER
FT FT /note= "FAM labelled"
FT modified_base 19
FT FT /*tag= b
FT FT /mod_base= OTHER
FT FT /note= "TAMRA labelled"
XX

```

PN WO2003049591-A2.
XX 19-JUN-2003.
XX 06-DEC-2002; 2002WO-US039138.
XX 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
XX Freier SM, Roach MP;
XX WPI; 2003-577271/54.
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT Gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Example 13; Page 71; 104pp; English.
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is human PCTAIRE
CC protein kinase 1 DNA specific PCR probe. This sequence is used to
CC illustrate the method of the invention
XX
XX Sequence 19 BP; 3 A; 8 C; 5 G; 3 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 111 CCGCGCGATCGCATGGAT 129
DB 1 CCGCGCGATCGCATGGAT 19
RESULT 93
ACI39577
ID ACI39577 standard; DNA; 25 BP.
XX
XX ACI39577;
XX
XX 13-OCT-2003 (first entry)
XX Human microarray DNA oligonucleotide SEQ ID NO 39568.
XX
XX EST; ss; probe; expressed sequence tag; microarray; gene expression;
KW Genetic variation; biallelic marker; polymorphism; human;
KW cross-species comparison.
XX
XX Homo sapiens.
XX
XX US2003104410-A1.
XX
XX 05-JUN-2003.
XX
XX 15-MAR-2002; 2002US-00098263.
XX
XX 16-MAR-2001; 2001US-0276759P.
XX
XX (AFFY-) AFFYMETRIX INC.
XX

PI Mittmann MP;
XX WPI; 2003-567953/53.
XX
XX New array of nucleic acid probes, useful for in situ hybridization, in
PT Southern, Northern or dot-blot hybridization to identify or detect the
PT sequence or specific mutations of any gene.
XX
XX Claim 1; SEQ ID NO 39568; 9pp; English.
XX
XX The invention discloses a microarray comprising a plurality of nucleic
CC acid probes including one of 2,018,500 fully defined sequences, or its
CC perfect match, perfect mismatch, antisense match or antisense mismatch.
CC Also disclosed is a method of gene expression analysis. The array is used
CC in monitoring gene expression levels by hybridisation to a DNA library,
CC in analysis of genetic variation or in hybridisation of tag-labelled
CC compounds. The nucleic acid probes are specifically designed for analysis
CC of at least one target sequence. The method of analysis comprises
CC hybridising at least one or more nucleic acids to at least two or more
CC nucleic acid probes and detecting the hybridisation. The nucleic acid
CC probes are attached to a solid support. The analysis comprises monitoring
CC gene expression levels, identifying biallelic markers or polymorphisms,
CC or family members of a gene and a cross-species comparison. Each of the
CC nucleic acids further comprises a tag sequence. The array of nucleic acid
CC probes is useful in in situ hybridisation, in Southern, Northern or dot-
CC blot hybridisation to identify or detect the sequence or specific
CC mutations of any gene, in mapping the 5' termini of mRNA molecules by
CC primer extensions or in screening cDNA or genomic libraries or subclones
CC for additional subclones containing segments of DNA that have been
CC isolated and previously sequenced. The sequence presented is one of the
CC nucleic acid probes incorporated in the microarray. Note: The sequence
CC data for this patent can also be obtained in electronic format directly
CC from USPTO at seqdata.uspto.gov/sequence.html
XX
XX Sequence 25 BP; 7 A; 6 C; 8 G; 4 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 18.8; DB 1; Length 25;
Best Local Similarity 90.9%; Pred. No. 1.2e+02;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1256 TAGGAACCCCACTGAGGAGAC 1277
DB 4 TAGGCACTCCCACTGAGGAGAC 25
RESULT 94
ABT04565
ID ABT04565 standard; DNA; 28 BP.
XX
XX ABT04565;
XX
XX 25-SEP-2002 (first entry)
XX
XX Human ALDH3 gene probe SEQ ID NO: 31.
XX
XX Human; drug metabolism; enzyme; probe; ss.
XX
XX Homo sapiens.
XX
XX JP2002142780-A.
XX
XX 21-MAY-2002.
XX
XX 28-AUG-2001; 2001JP-00257338.
XX
XX 04-SEP-2000; 2000JP-00267163.
XX
XX (SAKA) OTSUKA SEIYAKU KOGYO KK.
XX
XX WPI; 2002-552472/59.
XX
XX Measurement of an enzyme participating to the first phase reaction of
PT drug metabolism, a probe and a kit for it.
PT

XX Claim 4; Page 20; 36pp; Japanese.
PS The present invention relates to probes which can be used for the
CC measurement of an enzyme. The probes can be used for the measurement of
CC an enzyme participating to the first phase reaction of drug metabolism.
CC The present sequence is a probe shown in the invention
XX
SQ Sequence 28 BP; 7 A; 9 C; 6 G; 6 T; 0 U; 0 Other;
Query Match 1.1%; Score 18.8; DB 1; Length 28;
Best Local Similarity 90.9%; Pred. No. 1.3e+02;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 845 AGTACTCGACAAGGACCTGAA 866
DB 7 AGTACTCGACAAGGACCTGTA 28
RESULT 95
ABN15303
ID ABN15303 standard; DNA; 25 BP.
XX AC ABN15303;
XX
XX 29-MAY-2002 (first entry)
XX Human GDMPLP-1 25-mer scanning SEQ ID NO:5 sequence SEQ ID NO:15295.
XX Human; genome-derived myosin-like protein 1; GDMPLP-1; heart;
XX muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
XX skeletal muscle disorder; amplicon; screening; ss.
OS Homo sapiens.
XX WO200192524-A2.
XX
XX 06-DEC-2001.
XX
XX 25-MAY-2001; 2001WO-US016981.
XX
XX 26-MAY-2000; 2000US-0207456P.
XX 21-SEP-2000; 2000US-0234687P.
XX 27-SEP-2000; 2000US-0236359P.
XX 04-OCT-2000; 2000GB-00024283.
XX 30-JAN-2001; 2001WO-US000661.
XX 30-JAN-2001; 2001WO-US000662.
XX 30-JAN-2001; 2001WO-US000663.
XX 30-JAN-2001; 2001WO-US000664.
XX 30-JAN-2001; 2001WO-US000665.
XX 30-JAN-2001; 2001WO-US000666.
XX 30-JAN-2001; 2001WO-US000667.
XX 30-JAN-2001; 2001WO-US000668.
XX 30-JAN-2001; 2001WO-US000669.
XX 05-FEB-2001; 2001US-0266860P.
XX (AEOM-) AEOMICA INC.
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX WPI; 2002-179446/23.
XX
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
XX or as specific biomolecule capture probes for surface-enhanced laser
XX desorption ionization, comprises human myosin-like protein hGDMPLP-1.
XX
XX Disclosure; SEQ ID NO 15295; 214pp; English.
XX
XX The present invention describes a human genome-derived myosin-like
XX protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
XX 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
XX nucleic acids can be used as probes to detect, characterise and quantify

CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMPLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMPLP-1, in particular heart
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
XX at ftp.wipo.int/pub/published_pct_sequence
SQ Sequence 25 BP; 2 A; 12 C; 4 G; 7 T; 0 U; 0 Other;
Query Match 1.1%; Score 18.6; DB 1; Length 25;
Best Local Similarity 84.0%; Pred. No. 1.3e+02;
Matches 21; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 555 CCTCAGCGCGCGCTCGCTGTC 579
DB 1 CCTCATCTCCGGCTCATCTGTC 25
RESULT 96
ABV82335/c
ID ABV82335 standard; DNA; 25 BP.
XX AC ABV82335;
XX
XX 03-JAN-2003 (first entry)
XX
XX Human HTPL scanning oligonucleotide SEQ ID 3581.
XX Human; gene therapy; tumour suppressor; HTPL; chromosome 10p2.1;
XX human testis expressed Patched like protein; testis; adrenal; liver;
XX male germ cell development; bone marrow; brain; kidney; lung; placenta;
XX prostate; skeletal muscle; colon; male infertility; cancer; ss.
OS Homo sapiens.
XX EP1229046-A2.
XX
XX 07-AUG-2002.
XX
XX 28-JAN-2002; 2002EP-00001167.
XX
XX 30-JAN-2001; 2001WO-US000663.
XX 30-JAN-2001; 2001WO-US000664.
XX 30-JAN-2001; 2001WO-US000665.
XX 30-JAN-2001; 2001WO-US000667.
XX 30-JAN-2001; 2001WO-US000668.
XX 30-JAN-2001; 2001WO-US000669.
XX 23-MAY-2001; 2001WO-US0064761.
XX 09-OCT-2001; 2001US-0327898P.
XX (AEOM-) AEOMICA INC.
XX Zhan J;
XX WPI; 2002-676592/73.
XX
XX Novel isolated human testis expressed Patched like protein (HTPL), useful
XX for identifying agonist and antagonist and specific binding partners, and
XX for treating subjects having defects in HTPL.
XX Example 2; Page 533; 718pp; English.
PS

XX The present invention relates to human testis expressed Patched like
CC protein (HTPL, see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL
CC has two isoforms, with a few single base pair differences between the
CC two. One of the single base pair changes introduces a premature stop
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC shares an overall structure organisation with the Patched protein. The
CC shared structural features strongly imply that HTPL plays a role similar
CC to that of Patched, and is a potential tumour suppressor. HTPL is
CC important in regulating male germ cell development, and the HTPL gene was
CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are
CC useful for diagnosing a disorder caused by mutation in HTPL, and in
CC therapy and manufacture of a medicament for treatment or prevention of
CC such disorder associated with decreased expression or activity of human
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC clinically useful diagnostic markers and potential therapeutic agents for
CC male infertility and cancer. The present oligonucleotide was used in an
CC example from the invention
XX
SQ Sequence 25 BP; 7 A; 12 C; 2 G; 4 T; 0 U; 0 Other;
Query Match 1.1%; Score 18.6; DB 1; Length 25;
Best Local Similarity 84.0%; Pred. No. 1.3e+02;
Matches 21; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 217 GGCTGGATGAGAGTGGTGGTGGT 241
|||||
DB 25 GGCCAGGATGTTAGTGGTGGT 1
RESULT 97
ID ABV82336/c
AC ABV82336;
DT 03-JAN-2003 (first entry)
XX Human HTPL scanning oligonucleotide SEQ ID 3582.
XX Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
KW human testis expressed Patched like protein; testis; adrenal; liver;
KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX Homo sapiens.
XX EP1229046-A2.
XX 07-AUG-2002.
XX 28-JAN-2002; 2002EP-00001167.
XX 30-JAN-2001; 2001WO-US000663.
XX 30-JAN-2001; 2001WO-US000664.
XX 30-JAN-2001; 2001WO-US000665.
XX 30-JAN-2001; 2001WO-US000667.
XX 30-JAN-2001; 2001WO-US000668.
XX 30-JAN-2001; 2001WO-US000669.
XX 29-MAY-2001; 2001US-00864761.
XX 09-OCT-2001; 2001US-0327898P.
XX (AEOM-) AEOMICA INC.
XX Zhan J;
XX WPI; 2002-676582/73.
XX Novel isolated human testis expressed Patched like protein (HTPL), useful
PT for identifying agonist and antagonist and specific binding partners, and
PT for treating subjects having defects in HTPL.

XX Example 2; Page 533; 718pp; English.
XX The present invention relates to human testis expressed Patched like
CC protein (HTPL, see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL
CC has two isoforms, with a few single base pair differences between the
CC two. One of the single base pair changes introduces a premature stop
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC shares an overall structure organisation with the Patched protein. The
CC shared structural features strongly imply that HTPL plays a role similar
CC to that of Patched, and is a potential tumour suppressor. HTPL is
CC important in regulating male germ cell development, and the HTPL gene was
CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are
CC useful for diagnosing a disorder caused by mutation in HTPL, and in
CC therapy and manufacture of a medicament for treatment or prevention of
CC such disorder associated with decreased expression or activity of human
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, are
CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC clinically useful diagnostic markers and potential therapeutic agents for
CC male infertility and cancer. The present oligonucleotide was used in an
CC example from the invention
XX
SQ Sequence 25 BP; 7 A; 11 C; 2 G; 5 T; 0 U; 0 Other;
Query Match 1.1%; Score 18.6; DB 1; Length 25;
Best Local Similarity 84.0%; Pred. No. 1.3e+02;
Matches 21; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 216 AGCCCTGGATGAGAGTGGTGGTGGT 240
|||||
DB 25 AGCCAGGATGTTAGTGGTGGT 1
RESULT 98
ID ACK02038/c
AC ACK02038;
DT 14-OCT-2003 (first entry)
XX Human microarray DNA oligonucleotide SEQ ID NO 102019.
XX EST; ss; probe; expressed sequence tag; microarray; gene expression;
KW genetic variation; biallelic marker; polymorphism; human;
KW cross-species comparison.
XX Homo sapiens.
XX US2003104410-A1.
XX 05-JUN-2003.
XX 15-MAR-2002; 2002US-00098263.
XX 16-MAR-2001; 2001US-0276759P.
XX (AFFY-) AFFYMETRIX INC.
XX Mittmann MP;
XX WPI; 2003-567953/53.
XX New array of nucleic acid probes, useful for in situ hybridization, in
PT Southern, Northern or dot-blot hybridization to identify or detect the
PT sequence or specific mutations of any gene.
XX Claim 1; SEQ ID NO 102019; 9pp; English.
XX The invention discloses a microarray comprising a plurality of nucleic
CC acid probes including one of 2,018,500 fully defined sequences, or its
CC perfect match, perfect mismatch, antisense match or antisense mismatch.

CC Also disclosed is a method of gene expression analysis. The array is used
 CC in monitoring gene expression levels by hybridisation to a DNA library,
 CC in analysis of genetic variation or in hybridisation of tag-labelled
 CC compounds. The nucleic acid probes are specifically designed for analysis
 CC of at least one target sequence. The method of analysis comprises
 CC hybridising at least one or more nucleic acids to at least two or more
 CC nucleic acid probes and detecting the hybridisation. The nucleic acid
 CC probes are attached to a solid support. The analysis comprises monitoring
 CC gene expression levels, identifying biallelic markers or polymorphisms,
 CC or family members of a gene and a cross-species comparison. Each of the
 CC nucleic acids further comprises a tag sequence. The array of nucleic acid
 CC probes is useful in situ hybridisation, in Southern, Northern or dot-
 CC blot hybridisation to identify or detect the sequence or specific
 CC mutations of any gene, in mapping the 5' termini of mRNA molecules by
 CC primer extensions or in screening cDNA or genomic libraries or subclones
 CC for additional subclones containing segments of DNA that have been
 CC isolated and previously sequenced. The sequence presented is one of the
 CC nucleic acid probes incorporated in the microarray. Note: The sequence
 CC data for this patent can also be obtained in electronic format directly
 CC from USPTO at seqdata.uspto.gov/sequence.html
 XX
 SQ Sequence 25 BP; 5 A; 8 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 1.1%; Score 18.6; DB 1; Length 25;
 Best Local Similarity 84.0%; Pred. No. 1.3e+02;
 Matches 21; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 391 TCGGATGAGGTGCAGTCTCCAGTCA 415
 DB 25 TAGGATGAGGTGCACCTCAAGTCA 1

RESULT 99
 ABA99028/c
 ID ABA99028 standard; DNA; 27 BP.
 XX
 AC ABA99028;
 XX
 DT 20-MAY-2002 (first entry)
 XX
 DE Human mammary gland enriched chemokine PCR primer #3.
 XX
 KW Human; MEC; mammary gland enriched chemokine; chemokine; tumour; cancer;
 KW cytostatic; antiinflammatory; inflammation; PCR; primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN US2002009735-A1.
 XX
 PD 24-JAN-2002.
 XX
 PF 21-MAR-2001; 2001US-00813492.
 XX
 PR 23-MAR-2000; 2000US-0191654P.
 XX
 PA (LABO/) LABOW M A.
 PA (MICK/) MICKANIN C S.
 PA (BHAT/) BHATIA U.
 XX
 PI Labow MA, Mickanin CS, Bhatia U;
 XX
 DR WPI; 2002-187776/24.
 XX
 PT Regulating tumor or adverse bodily reaction, involves providing
 PT therapeutic composition comprising a mammary gland chemokine, and
 PT providing the composition to the tumor or to the area of adverse
 PT reaction.

PS Disclosure; Page 5; 11pp; English.
 XX
 CC The sequence represents a human mammary gland enriched chemokine (MEC)
 CC PCR primer. The primer was used in the invention to amplify the coding
 CC region of MECR. The invention relates to a novel method for regulating a

CC tumour or adverse bodily reaction, comprising providing a therapeutic
 CC composition having a mammary gland chemokine polypeptide. The polypeptide
 CC of the invention has cytostatic and antiinflammatory activity. The method
 CC reaction. The invention also provides a method useful for detecting a
 CC tumour using a probe comprising the polynucleotide or an antibody to the
 CC MEC. The adverse bodily reactions include cancer and inflammation
 XX
 SQ Sequence 27 BP; 5 A; 7 C; 9 G; 6 T; 0 U; 0 Other;

Query Match 1.1%; Score 18.6; DB 1; Length 27;
 Best Local Similarity 84.0%; Pred. No. 1.4e+02;
 Matches 21; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 941 GCCTGGCCTACTGCCACCGCAGAA 965
 DB 26 GCCTGGCCTACTGGCACTGACACA 2

RESULT 100
 ABT03768
 ID ABT03768 standard; DNA; 27 BP.
 XX
 AC ABT03768;
 XX
 DT 13-SEP-2002 (first entry)
 XX
 DE Human SHH gene PCR primer SEQ ID NO: 289.
 XX
 KW Human; cancer; neoplastic disease; tumour specific marker; cytostatic;
 KW transcription factor; PCR; primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200240716-A2.
 XX
 PD 23-MAY-2002.
 XX
 PF 13-NOV-2001; 2001WO-US043461.
 XX
 PR 16-NOV-2000; 2000US-0249508P.
 XX
 PA (CEMI-) CEMINES LLC.
 XX
 PI Palm K;
 XX
 DR WPI; 2002-537346/57.
 XX
 PT Determining the presence of neoplastic molecular markers, by identifying
 PT the presence of markers in host test sample using array of neoplastic
 PT molecular marker specific reagents and analyzing the array of the
 PT reagents.

Example 1; Page 19; 41pp; English.

PS The present invention relates to a method for determining the presence of
 CC neoplastic molecular markers in a host, involving the use of neoplastic
 CC molecular marker specific reagents to detect such markers and analysing
 CC the array of reagents, allowing the identification of the neoplastic
 CC disease present. This can be used to determine the best treatment for
 CC cancer, in particular neural cell, lung and prostate tumours. The
 CC present sequence is a PCR primer useful for detecting the coding
 CC sequences of markers of the invention
 XX
 SQ Sequence 27 BP; 3 A; 11 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 1.0%; Score 18.2; DB 1; Length 27;
 Best Local Similarity 87.0%; Pred. No. 1.7e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 921 CCTGTTCCAGCTGCTCGGTGCC 943
 DB 3 CCTGTTCCAGGTGCACCGTGCC 25

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RESULT 101
AAV21840/C
ID AAV21840 standard; DNA; 24 BP.
XX
AC AAV21840;
XX
DT 14-JUL-1998 (first entry)
XX
DE Nuclease resistant antisense oligo NBT 55 targeted against parB gene.
XX
KW Nuclease resistant; bacterial infection; antibiotic; target;
KW veterinary medicine; treatment; human; industrial process;
KW bacterial control; ss.
XX
OS Synthetic.
XX
PN WO9803533-A1.
XX
PD 29-JAN-1998.
XX
PF 23-JUL-1997; 97WO-US012961.
XX
PR 24-JUL-1996; 96US-00685575.
XX
PA (OLIG-) OLIGOS ETC & OLIGOS THERAPEUTICS INC.
XX
PI Arrow A, Dale RMK, Thompson TL;
XX
DR WPI; 1998-120697/11.
XX
PT Treating bacterial infections in humans or animals with
PT oligo:nucleotide(s) - resistant to nuclease and targeted to bacterial
PT nucleic acid or proteins, also conjugates of these oligo:nucleotide(s)
PT with antibiotics.
XX
PS Claim 49; Page 83; 163pp; English.
XX
CC This antisense oligonucleotide is nuclease resistant and can be used in
CC the treatment of animals, including humans, having a bacterial infection.
CC The treatment comprises administration of such nuclease resistant
CC oligonucleotides, targeted to a nucleic acid or protein of the bacterium,
CC and formulated with a carrier. A compound comprising this nuclease
CC resistant oligonucleotide can be covalently linked to an antibiotic. The
CC method is used to treat infections by a wide variety of Gram-positive and
CC Gram-negative, or acid-fast, bacteria, in human and veterinary medicine.
CC The methods are particularly used in immuno-compromised individuals (e.g.
CC patients with acquired immunodeficiency syndrome or those receiving
CC chemotherapy or radiation therapy), optionally in combination with, or
CC fused to, antiviral or other antimicrobial oligonucleotides. Apart from
CC therapeutic use, the oligonucleotides can be used to control bacteria in
CC laboratory cultures, foods, beverages and industrial processes. The
CC oligonucleotides are specific for bacteria, without affecting metabolism
CC in mammalian cells. They may also activate RNase H and have a general,
CC non-specific immune-stimulating effect. The oligonucleotides can be
CC administered orally, intranasally, rectally, topically or by injection,
CC optionally coupled to an agent (e.g. carbohydrate or polyamine) that
CC enhances cellular uptake
XX
SQ Sequence 24 BP; 2 A; 6 C; 5 G; 11 T; 0 U; 0 Other;
Query Match 1.0%; Score 17.8; DB 1; Length 24;
Best Local Similarity 90.5%; Pred. No. 1.8e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1435 GAGGATGCCATGAACATCCA 1455
Db 21 GAGAGGCCATGAACATCCA 1
RESULT 102
AAV05313

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ID AAV05313 standard; DNA; 25 BP.
XX
AC AAV05313;
XX
DT 06-JUL-1998 (first entry)
XX
DE Kinase domain 5' PCR primer.
XX
KW Williams syndrome cognitive profile; WSCP; cognition; LIM-kinase 1;
KW LIMK1 gene; supra-vascular aortic stenosis; protein kinase; human; PCR;
KW primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9801740-A2.
XX
PD 15-JAN-1998.
XX
PF 07-JUL-1997; 97WO-US011687.
XX
PR 10-JUL-1996; 96US-00678039.
XX
PA (UTAH) UNIV UTAH RES FOUND.
XX
PI Keating MT, Morris CA;
XX
DR WPI; 1998-101185/09.
XX
PT Diagnosing Williams syndrome cognitive profile from hemi-zygosity of
PT LIMK1 - gene on chromosome 7 encoding new kinase, allowing
PT differentiation from classic Williams syndrome and supra-vascular aortic
PT stenosis.
XX
PS Example 3; Page 22; 62pp; English.
XX
CC This oligonucleotide was designed to amplify the region of homology in
CC the kinase domains of PDGF receptor, HER2, HER3, FGF-FUG, FGF-BEK,
CC insulin receptor and IIR. It was used with another kinase homology domain
CC -based primer (see AAV05314) in the amplification of human LIM-kinase 1
CC (LIMK1) sequences. The LIMK1 gene is composed of 16 exons (see AAV05315
CC and AA79559-T99529) and is located 15.4 kb 3' of elastin in chromosome
CC 7. It encodes a novel protein kinase (see AA46576). Williams syndrome
CC cognitive profile (WSCP) is detected by determining zygosity of the LIMK1
CC locus, with hemizyosity being indicative of impaired visuo-spatial
CC constructive cognition. Chromosome 7 deletion analysis allows
CC discrimination between WSCP, SVAS (supra-vascular aortic stenosis) and
CC Williams syndrome
XX
SQ Sequence 25 BP; 4 A; 6 C; 9 G; 6 T; 0 U; 0 Other;
Query Match 1.0%; Score 17.6; DB 1; Length 25;
Best Local Similarity 83.3%; Pred. No. 2e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1033 GACTTTGGCTGGCCGAGCCCAAG 1056
Db 1 GACTTTGGCTGGCTCGAGCATG 24
RESULT 103
ABN15302
ID ABN15302 standard; DNA; 25 BP.
XX
AC ABN15302;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMLP-1 25-mer scanning SEQ ID NO:5 sequence SEQ ID NO:15294.
XX
KW Human; genome-derived myosin-like protein 1; GDMLP-1; bGDMLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.

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OS Homo sapiens.
XX WO200192524-A2.
XX 06-DEC-2001.
XX 25-MAY-2001; 2001WO-US016981.
XX 26-MAY-2000; 2000US-0207456P.
XX 21-SEP-2000; 2000US-0234687P.
XX 27-SEP-2000; 2000US-0236359P.
XX 04-OCT-2000; 2000GB-00024263.
XX 30-JAN-2001; 2001WO-US000661.
XX 30-JAN-2001; 2001WO-US000662.
XX 30-JAN-2001; 2001WO-US000663.
XX 30-JAN-2001; 2001WO-US000664.
XX 30-JAN-2001; 2001WO-US000665.
XX 30-JAN-2001; 2001WO-US000666.
XX 30-JAN-2001; 2001WO-US000667.
XX 30-JAN-2001; 2001WO-US000668.
XX 30-JAN-2001; 2001WO-US000669.
XX 05-FEB-2001; 2001WO-US000670.
XX 05-FEB-2001; 2001US-0266860P.
XX (AEOM-) AEOMICA INC.
XX Gu Y, Ji Y, Penn SG, Hanzel DX, Rank DR, Chen W, Shannon ME;
XX WPI; 2002-179446/23.
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
XX Disclosure; SEQ ID NO 15294; 214pp; English.
XX The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMPLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMPLP-1, in particular heart
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX Sequence 25 BP; 2 A; 11 C; 4 G; 8 T; 0 U; 0 Other;
SQ Query Match 1.0%; Score 17.6; DB 1; Length 25;
Best Local Similarity 83.3%; Pred. No. 2e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 555 CCTCAGCCGCCCTCCCTCGGT 578
DB 2 CCTCATCCCGGCTCCACCGGT 25

RESULT 104
ABN15304

ID XX ABN15304 standard; DNA; 25 BP.
XX AC ABN15304;
XX DT 29-MAY-2002 (first entry)
XX DE Human GDMPLP-1 25-mer scanning SEQ ID NO:5 sequence SEQ ID NO:15296.
XX KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX OS Homo sapiens.
XX PN WO200192524-A2.
XX PD 06-DEC-2001.
XX PF 25-MAY-2001; 2001WO-US016981.
XX PR 26-MAY-2000; 2000US-0207456P.
XX PR 21-SEP-2000; 2000US-0234687P.
XX PR 27-SEP-2000; 2000US-0236359P.
XX PR 04-OCT-2000; 2000GB-00024263.
XX PR 30-JAN-2001; 2001WO-US000661.
XX PR 30-JAN-2001; 2001WO-US000662.
XX PR 30-JAN-2001; 2001WO-US000663.
XX PR 30-JAN-2001; 2001WO-US000664.
XX PR 30-JAN-2001; 2001WO-US000665.
XX PR 30-JAN-2001; 2001WO-US000666.
XX PR 30-JAN-2001; 2001WO-US000667.
XX PR 30-JAN-2001; 2001WO-US000668.
XX PR 30-JAN-2001; 2001WO-US000669.
XX PR 05-FEB-2001; 2001WO-US000670.
XX PR 05-FEB-2001; 2001US-0266860P.
XX PA (AEOM-) AEOMICA INC.
XX Gu Y, Ji Y, Penn SG, Hanzel DX, Rank DR, Chen W, Shannon ME;
XX WPI; 2002-179446/23.
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
XX Disclosure; SEQ ID NO 15296; 214pp; English.
XX The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMPLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMPLP-1, in particular heart
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX Sequence 25 BP; 2 A; 12 C; 4 G; 7 T; 0 U; 0 Other;
SQ

Query Match 1.0%; Score 17.6; DB 1; Length 25;
Best Local Similarity 83.3%; Pred. No. 2e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 556 CTCAGCGCGCGCTCGCTGTC 579
Db 1 CTCATCTCCGCTCCATCGTTC 24

RESULT 105
ABV82337/C
ID ABV82337 standard; DNA; 25 BP.

XX AC ABV82337;

XX DT 03-JAN-2003 (first entry)

DE DE Human HTPL scanning oligonucleotide SEQ ID 3583.

DE DE Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;

KW human testis expressed Patched like protein; testis; adrenal; liver;

KW male germ cell development; bone marrow; brain; kidney; lung; placenta;

KW prostate; skeletal muscle; colon; male infertility; cancer; ss.

XX OS Homo sapiens.

XX PN EP1229046-A2.

XX PD 07-AUG-2002.

XX PF 28-JAN-2002; 2002EP-00001167.

XX PR 30-JAN-2001; 2001WO-US000663.

XX PR 30-JAN-2001; 2001WO-US000664.

XX PR 30-JAN-2001; 2001WO-US000665.

XX PR 30-JAN-2001; 2001WO-US000667.

XX PR 30-JAN-2001; 2001WO-US000668.

XX PR 30-JAN-2001; 2001WO-US000669.

XX PR 23-MAY-2001; 2001US-00864761.

XX PR 09-OCT-2001; 2001US-0327898P.

XX PA (AEOM-) AEOMICA INC.

XX Zhan J;

XX WPI; 2002-676582/73.

XX Novel isolated human testis expressed Patched like protein (HTPL), useful

PT for identifying agonist and antagonist and specific binding partners, and

PT for treating subjects having defects in HTPL.

XX Example 2; Page 533; 718pp; English.

XX The present invention relates to human testis expressed Patched like

CC protein (HTPL, see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL

CC has two isoforms, with a few single base pair differences between the

CC two. One of the single base pair changes introduces a premature stop

CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL

CC shares an overall structure organisation with the Patched protein. The

CC shared structural features strongly imply that HTPL plays a role similar

CC to that of Patched, and is a potential tumour suppressor. HTPL is

CC important in regulating male germ cell development, and the HTPL gene was

CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are

CC useful for diagnosing a disorder caused by mutation in HTPL, and in

CC therapy and manufacture of a medicament for treatment or prevention of

CC such disorder associated with decreased expression or activity of human

CC HTPL. Such disorders include disorders of testis, or adrenal, adult and

CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,

CC skeletal muscle or colon function. HTPL proteins and nucleic acids are

CC clinically useful diagnostic markers and potential therapeutic agents for

CC male infertility and cancer. The present oligonucleotide was used in an

CC example from the invention

XX

SQL Sequence 25 BP; 6 A; 11 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 1.0%; Score 17.6; DB 1; Length 25;

Best Local Similarity 83.3%; Pred. No. 2e+02;

Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 216 AGGCTCGATGAGAGTGTGTGG 239

Db 24 AGGCAGGATGTTAGTGTGTGG 1

RESULT 106
ABV82334/C

ID ABV82334 standard; DNA; 25 BP.

XX AC ABV82334;

XX DT 03-JAN-2003 (first entry)

DE DE Human HTPL scanning oligonucleotide SEQ ID 3580.

DE DE Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;

KW human testis expressed Patched like protein; testis; adrenal; liver;

KW male germ cell development; bone marrow; brain; kidney; lung; placenta;

KW prostate; skeletal muscle; colon; male infertility; cancer; ss.

XX OS Homo sapiens.

XX PN EP1229046-A2.

XX PD 07-AUG-2002.

XX PF 28-JAN-2002; 2002EP-00001167.

XX PR 30-JAN-2001; 2001WO-US000663.

XX PR 30-JAN-2001; 2001WO-US000664.

XX PR 30-JAN-2001; 2001WO-US000665.

XX PR 30-JAN-2001; 2001WO-US000667.

XX PR 30-JAN-2001; 2001WO-US000668.

XX PR 23-MAY-2001; 2001US-00864761.

XX PR 09-OCT-2001; 2001US-0327898P.

XX PA (AEOM-) AEOMICA INC.

XX Zhan J;

XX WPI; 2002-676582/73.

PT Novel isolated human testis expressed Patched like protein (HTPL), useful

PT for identifying agonist and antagonist and specific binding partners, and

PT for treating subjects having defects in HTPL.

XX Example 2; Page 533; 718pp; English.

CC The present invention relates to human testis expressed Patched like

CC protein (HTPL, see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL

CC has two isoforms, with a few single base pair differences between the

CC two. One of the single base pair changes introduces a premature stop

CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL

CC shares an overall structure organisation with the Patched protein. The

CC shared structural features strongly imply that HTPL plays a role similar

CC to that of Patched, and is a potential tumour suppressor. HTPL is

CC important in regulating male germ cell development, and the HTPL gene was

CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are

CC useful for diagnosing a disorder caused by mutation in HTPL, and in

CC therapy and manufacture of a medicament for treatment or prevention of

CC such disorder associated with decreased expression or activity of human

CC HTPL. Such disorders include disorders of testis, or adrenal, adult and

CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,

CC skeletal muscle or colon function. HTPL proteins and nucleic acids are

CC clinically useful diagnostic markers and potential therapeutic agents for

CC male infertility and cancer. The present oligonucleotide was used in an

CC example from the invention

XX

```
CC example from the invention
XX
SQ Sequence 25 BP; 7 A; 11 C; 2 G; 5 T; 0 U; 0 Other;
    Query Match      1.0%; Score 17.6; DB 1; Length 25;
    Best Local Similarity 83.3%; Pred. No. 2e+02;
    Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
    QY 218 GCCTGGATGAGTGGTGGTGGTG 241
    Db 25 GCCAGGATGTTAGTGGTGGTG 2

RESULT 107
ACI83994/c
ID ACK27269 standard; DNA; 25 BP.
XX
AC ACK27269;
XX
DT 14-OCT-2003 (first entry)
XX
DE Human microarray DNA oligonucleotide SEQ ID NO 127250.
XX
KW EST; ss; probe; expressed sequence tag; microarray; gene expression;
KW genetic variation; biallelic marker; polymorphism; human;
KW cross-species comparison.
XX
OS Homo sapiens.
XX
PN US2003104410-A1.
XX
PD 05-JUN-2003.
XX
PF 15-MAR-2002; 2002US-00098263.
XX
PR 16-MAR-2001; 2001US-0276759P.
XX
PA (AFFY-) AFFYMETRIX INC.
XX
PI Mittmann MP;
XX
DR WPI; 2003-567953/53.
XX
PT New array of nucleic acid probes, useful for in situ hybridization, in
PT Southern, Northern or dot-blot hybridization to identify or detect the
PT sequence or specific mutations of any gene.
XX
PS Claim 1; SEQ ID NO 127250; 9pp; English.
XX
CC The invention discloses a microarray comprising a plurality of nucleic
CC acid probes including one of 2,018,500 fully defined sequences, or its
CC perfect match, perfect mismatch, antisense match or antisense mismatch.
CC Also disclosed is a method of gene expression analysis. The array is used
CC in monitoring gene expression levels by hybridisation to a DNA library,
CC in analysis of genetic variation or in hybridisation of tag-labelled
CC compounds. The nucleic acid probes are specifically designed for analysis
CC of at least one target sequence. The method of analysis comprises
CC hybridising at least one or more nucleic acids to at least two or more
CC nucleic acid probes and detecting the hybridisation. The nucleic acid
CC probes are attached to a solid support. The analysis comprises monitoring
CC gene expression levels, identifying biallelic markers or polymorphisms,
CC or family members of a gene and a cross-species comparison. Each of the
CC probes is useful in situ hybridisation, in Southern, Northern or dot-
CC blot hybridisation to identify or detect the sequence or specific
CC mutations of any gene, in mapping the 5' termini of mRNA molecules by
CC primer extensions or in screening cDNA or genomic libraries or subclones
CC for additional subclones containing segments of DNA that have been
CC isolated and previously sequenced. The sequence presented is one of the
CC nucleic acid probes incorporated in the microarray. Note: The sequence
CC data for this patent can also be obtained in electronic format directly
CC from USPTO at seqdata.uspto.gov/sequence.html
XX
XX
SQ Sequence 25 BP; 8 A; 4 C; 5 G; 8 T; 0 U; 0 Other;
    Query Match      1.0%; Score 17.6; DB 1; Length 25;
    Best Local Similarity 83.3%; Pred. No. 2e+02;
    Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
    QY 794 TTACGCTACATGACATTATCCACA 817
    Db 25 TTATGCGACATGACATTTGTCACA 2

RESULT 108
ACI83994/c
ID ACI83994 standard; DNA; 25 BP.
XX
AC ACI83994;
XX
DT 14-OCT-2003 (first entry)
XX
DE Human microarray DNA oligonucleotide SEQ ID NO 83985.
XX
KW EST; ss; probe; expressed sequence tag; microarray; gene expression;
KW genetic variation; biallelic marker; polymorphism; human;
KW cross-species comparison.
XX
OS Homo sapiens.
XX
PN US2003104410-A1.
XX
PD 05-JUN-2003.
XX
PF 15-MAR-2002; 2002US-00098263.
XX
PR 16-MAR-2001; 2001US-0276759P.
XX
PA (AFFY-) AFFYMETRIX INC.
XX
PI Mittmann MP;
XX
DR WPI; 2003-567953/53.
XX
PT New array of nucleic acid probes, useful for in situ hybridization, in
PT Southern, Northern or dot-blot hybridization to identify or detect the
PT sequence or specific mutations of any gene.
XX
PS Claim 1; SEQ ID NO 83985; 9pp; English.
XX
CC The invention discloses a microarray comprising a plurality of nucleic
CC acid probes including one of 2,018,500 fully defined sequences, or its
CC perfect match, perfect mismatch, antisense match or antisense mismatch.
CC Also disclosed is a method of gene expression analysis. The array is used
CC in monitoring gene expression levels by hybridisation to a DNA library,
CC in analysis of genetic variation or in hybridisation of tag-labelled
CC compounds. The nucleic acid probes are specifically designed for analysis
CC of at least one target sequence. The method of analysis comprises
CC hybridising at least one or more nucleic acids to at least two or more
CC nucleic acid probes and detecting the hybridisation. The nucleic acid
CC probes are attached to a solid support. The analysis comprises monitoring
CC gene expression levels, identifying biallelic markers or polymorphisms,
CC or family members of a gene and a cross-species comparison. Each of the
CC probes is useful in situ hybridisation, in Southern, Northern or dot-
CC blot hybridisation to identify or detect the sequence or specific
CC mutations of any gene, in mapping the 5' termini of mRNA molecules by
CC primer extensions or in screening cDNA or genomic libraries or subclones
CC for additional subclones containing segments of DNA that have been
CC isolated and previously sequenced. The sequence presented is one of the
CC nucleic acid probes incorporated in the microarray. Note: The sequence
CC data for this patent can also be obtained in electronic format directly
CC from USPTO at seqdata.uspto.gov/sequence.html
XX
XX
SQ Sequence 25 BP; 4 A; 4 C; 7 G; 10 T; 0 U; 0 Other;
```

Query Match 1.0%; Score 17.6; DB 1; Length 25;
Best Local Similarity 83.3%; Pred. No. 2e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1056 GTCAATCCCAACAAGACATATCTC 1079
DB 25 GTCAAAACCTAAGAAAGACCTACTC 2

RESULT 109
ABK66872/c
ID ABK66872 standard; DNA; 26 BP.
XX
AC ABK66872;

XX 02-JUL-2002 (first entry)
XX Human gene specific PCR primer #960.
XX Primer; ss; DNA microarray; differential expression analysis; human.
XX Homo sapiens.
XX US6352829-B1.
XX 05-MAR-2002.
XX 05-JAN-1999; 99US-00225928.
XX 21-MAY-1997; 97US-00859998.
XX (CLON-) CLONTECH LAB INC.
XX Chenchik A, Johadze G, Bibilashvili R;
XX WPI; 2002-314699/35.

Producing sub-population of labeled nucleic acids, useful for analyzing differences in RNA profiles between several different physiological sources, using set of distinct gene specific primers.

Example 3; SEQ ID NO 960; lpp; English.

The invention relates to producing a sub-population of labeled nucleic acids (NAs) comprising contacting a NA sample from a physiological source, with a pool of 50 distinct gene specific primers under suitable conditions to enzymatically generate sub-population of NAs, where each gene specific primer has a sequence complementary to a distinct mRNA, and each labeled NA is generated using a single gene specific primer. The method is useful for producing a sub-population of labeled NAs which is useful for analysing the differences in the RNA profiles between several different physiological sources, where the method comprises producing subpopulation of labeled NAs for the different physiological sources, comprising the populations for each physiological source to identify differences in the population, where the comparison is preferably performed by hybridising the labeled NAs for each of the distinct physiological sources to an array of probes stably associated with the surface of a substrate to produce a hybridisation pattern for each of the sources, and comparing the patterns for each of the sources, where differential gene expression assays are utilised in differential expression analysis of diseased a normal tissue e.g. neoplastic a normal tissue, or different tissue or subtypes. The present sequence is a human gene specific PCR primer used in the method of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from USPTO at <http://wipo.seqdata.uspto.gov/sequence.html?DocID=6352829B1>

Sequence 26 BP; 10 A; 5 C; 9 G; 2 T; 0 U; 0 Other;

Query Match 1.0%; Score 17.6; DB 1; Length 26;
Best Local Similarity 83.3%; Pred. No. 2.1e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 826 TCCCTCACCCCTTGTCTTTGAGTAC 849
DB 25 TCTGTACCCCTTGTCTTTGAGTGC 2

RESULT 110
ABX17595
ID ABX17595 standard; DNA; 26 BP.
XX
AC ABX17595;

XX 05-FEB-2003 (first entry)

DE RTQ-PCR probe #2 for human protein NOV19.

XX Human; ss; NOVX; adrenoleukodystrophy; haemophilia; stoke; VHL; PCR;
KW congenital adrenal hyperplasia; haemophilia; hypercoagulation;
KW idiopathic thrombocytopenic purpura; autoimmune disease; allergy;
KW immunodeficiencies; transplantation; Von Hippel-Lindau syndrome;
KW Alzheimer's disease; tuberosus sclerosis; Parkinson's disease; epilepsy;
KW Huntington's disease; cerebral palsy; Lesch-Nyhan syndrome; pain;
KW multiple sclerosis; ataxia-telangiectasia; leukodystrophy; anxiety;
KW behavioural disorder; addiction; neuroprotection; diabetes; ARDS;
KW renal artery stenosis; interstitial nephritis; glomerulonephritis;
KW polycystic kidney disease; systemic lupus erythematosus; IGA; probe;
KW renal tubular acidosis; immunoglobulin A nephropathy; hypercalcaemia;
KW cirrhosis; transplantation; asthma; emphysema; scleroderma; GVHD;
KW adult respiratory distress syndrome; graft versus host disease;
KW lymphedema; fertility; pancreatitis; obesity; haemophilia; ulcer;
KW anaemia; cancer; trauma; regeneration; infection; RTQ-PCR;
KW real-time quantitative PCR.

XX Homo sapiens.

XX WO200281629-A2.

XX 17-OCT-2002.

XX 03-APR-2002; 2002WO-US010522.

XX 03-APR-2001; 2001US-0281086P.
XX 03-APR-2001; 2001US-0281136P.
XX 05-APR-2001; 2001US-0281863P.
XX 05-APR-2001; 2001US-0281906P.
XX 06-APR-2001; 2001US-0282020P.
XX 10-APR-2001; 2001US-0282934P.
XX 12-APR-2001; 2001US-0283512P.
XX 19-APR-2001; 2001US-0285325P.
XX 23-APR-2001; 2001US-0285890P.
XX 24-APR-2001; 2001US-0286068P.
XX 25-APR-2001; 2001US-0286292P.
XX 27-APR-2001; 2001US-0287213P.
XX 02-MAY-2001; 2001US-0288257P.
XX 12-MAY-2001; 2001US-0291134P.
XX 17-MAY-2001; 2001US-0291725P.
XX 31-MAY-2001; 2001US-0294771P.
XX 08-JUN-2001; 2001US-0296965P.
XX 18-JUN-2001; 2001US-0299128P.
XX 12-JUL-2001; 2001US-0305063P.
XX 14-NOV-2001; 2001US-0332780P.
XX 04-JAN-2002; 2002US-0345221P.
XX 02-APR-2002; 2002US-00345221.

(CURA-) CURAGEN CORP.

XX Spytek KA, Li L, Edinger SR, Ellerman K, Stone DJ, Malyankar UM;
PI Shimkets RA, Guo X, Anderson DW, Patturajan M, Berghs C, Gerlach V;
PI Taupier RJ, Pena CEA, Padigaru M, Liu Y, Burgess CE, Miller CE;
PI Gusev VV, Kekuda R, Gorman L, Zethusen BD, Baumgartner JC;
PI Tchernev VT, Vernet CAM, Smithson G, Heyes MP, Shency SG, Liu X;
PI Gangolli EA;
XX WPI; 2003-046863/04.


```
CC restenosis treatment
XX
SQ Sequence 19 BP; 6 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
    Query Match      1.0%; Score 17.4; DB 1; Length 19;
    Best Local Similarity 94.7%; Pred. No. 1.7e+02;
    Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
    QY 993 GAACCTGCTCATCAACGAG 1011
    Db 1 GAACCTGCTCATCAATGAG 19

RESULT 113
AAH57919
ID AAH57919 standard; DNA; 19 BP.
XX
AC AAH57919;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:343.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnery;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytosatic;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX WO200130362-A2.
XX
XX 03-MAY-2001.
XX
XX 26-OCT-2000; 2000WO-US029500.
XX
XX 26-OCT-1999; 99US-0161532P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Robbins JM, Tritz R;
XX
XX WPI; 2001-300427/31.
XX
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
XX PT that cleave RNA encoding cytokines involved in inflammation, matrix
XX PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
XX Example 1; Page 96; 408pp; English.
XX
XX The present invention describes a method for treating a proliferative
XX CC skin or eye disease and scarring. The method involves administering a
XX CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX CC dependent kinase, growth factor or a reductase, or administering a
XX CC nucleic acid molecule (II) comprising a promoter operably linked to a
XX CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
XX CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
XX CC ophthalmological, vulnery, keratolytic and virucide activities, and
XX CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX CC in gene therapy. (I) and (II) are useful for treating proliferative skin
XX CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX CC also be used for treating proliferative eye diseases such as diabetic
XX CC retinopathy, vitreoretinopathy, sickle cell retinopathy, and preventing
XX CC prematurity and retinal detachment, and for treating and preventing
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CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC CC exemplification of the present invention
XX
SQ Sequence 19 BP; 6 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
    Query Match      1.0%; Score 17.4; DB 1; Length 19;
    Best Local Similarity 94.7%; Pred. No. 1.7e+02;
    Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
    QY 993 GAACCTGCTCATCAACGAG 1011
    Db 1 GAACCTGCTCATCAATGAG 19

RESULT 114
AAH57923
ID AAH57923 standard; DNA; 19 BP.
XX
AC AAH57923;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:347.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnery;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytosatic;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX WO200130362-A2.
XX
XX 03-MAY-2001.
XX
XX 26-OCT-2000; 2000WO-US029500.
XX
XX 26-OCT-1999; 99US-0161532P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Robbins JM, Tritz R;
XX
XX WPI; 2001-300427/31.
XX
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
XX PT that cleave RNA encoding cytokines involved in inflammation, matrix
XX PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
XX Example 1; Page 97; 408pp; English.
XX
XX The present invention describes a method for treating a proliferative
XX CC skin or eye disease and scarring. The method involves administering a
XX CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX CC dependent kinase, growth factor or a reductase, or administering a
XX CC nucleic acid molecule (II) comprising a promoter operably linked to a
XX CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
XX CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
XX CC ophthalmological, vulnery, keratolytic and virucide activities, and
XX CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX CC in gene therapy. (I) and (II) are useful for treating proliferative skin
XX CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX CC also be used for treating proliferative eye diseases such as diabetic
```

CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
Query Match 1.0%; Score 17.4; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 1.7e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 1028 TGGCTGACTTGGCTGGC 1046
Db 1 TGGCTGACTTGGCTGGC 19
RESULT 115
ACI39576
ID ACI39576 standard; DNA; 25 BP.
XX
AC ACI39576;
XX
13-OCT-2003 (first entry)
XX
DE Human microarray DNA oligonucleotide SEQ ID NO 39567.
XX
KW EST; ss; probe; expressed sequence tag; microarray; gene expression;
KW genetic variation; biallelic marker; polymorphism; human;
KW cross-species comparison.
XX
OS Homo sapiens.
XX
PN US2003104410-A1.
XX
PD 05-JUN-2003.
XX
PF 15-MAR-2002; 2002US-00098263.
XX
PR 16-MAR-2001; 2001US-0276759P.
XX
PA (AFFY-) AFFYMETRIX INC.
XX
PI Mittmann MP;
XX
WPI; 2003-567953/53.
XX
PT New array of nucleic acid probes, useful for in situ hybridization, in
PT Southern, Northern or dot-blot hybridization to identify or detect the
PT sequence or specific mutations of any gene.
XX
PS Claim 1; SEQ ID NO 39567; 9pp; English.
XX
CC The invention discloses a microarray comprising a plurality of nucleic
CC acid probes including one of 2,018,500 fully defined sequences, or its
CC perfect match, perfect mismatch, antisense match or antisense mismatch.
CC Also disclosed is a method of gene expression analysis. The array is used
CC in monitoring gene expression levels by hybridisation to a DNA library,
CC in analysis of genetic variation or in hybridisation of tag-labelled
CC compounds. The nucleic acid probes are specifically designed for analysis
CC of at least one target sequence. The method of analysis comprises
CC hybridising at least one or more nucleic acids to at least two or more
CC nucleic acid probes and detecting the hybridisation. The nucleic acid
CC probes are attached to a solid support. The analysis comprises monitoring
CC gene expression levels, identifying biallelic markers or polymorphisms,
CC or family members of a gene and a cross-species comparison. Each of the
CC nucleic acids further comprises a tag sequence. The array of nucleic acid
CC probes is useful in in situ hybridisation, in Southern, Northern or dot-
CC blot hybridisation to identify or detect the sequence or specific
CC mutations of any gene, in mapping the 5' termini of mRNA molecules by
CC primer extensions or in screening cDNA or genomic libraries or subclones
CC for additional subclones containing segments of DNA that have been
CC isolated and previously sequenced. The sequence presented is one of the

CC nucleic acid probes incorporated in the microarray. Note: The sequence
CC data for this patent can also be obtained in electronic format directly
CC from USPTO at seqdata.uspto.gov/sequence.html
XX
SQ Sequence 25 BP; 7 A; 5 C; 9 G; 4 T; 0 U; 0 Other;
Query Match 1.0%; Score 17.2; DB 1; Length 25;
Best Local Similarity 86.4%; Pred. No. 2.5e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 1256 TAGGAACCCCACTGAGGAGAC 1277
Db 4 TAGGCACTCGAAGTGGAGAGAC 25
RESULT 116
AAx29342
ID AAX29342 standard; DNA; 20 BP.
XX
AC AAX29342;
XX
10-JUN-1999 (first entry)
XX
DE Chemically modified sense control probe ISIS No: 14318.
XX
KW Antisense oligonucleotide; Jun N-terminal kinase; JNK; hybridise; JNK1;
KW JNK2; JNK3; cell cycle progression; phosphorylation; tumour; probe;
KW hyperproliferative disease; human; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9909214-A1.
XX
PD 25-FEB-1999.
XX
PF 07-AUG-1998; 98WO-US016488.
XX
PR 13-AUG-1997; 97US-00910629.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI McKay R, Dean N, Monia BP, Nero PS, Gaarde WA;
XX
WPI; 1999-181060/15.
XX
PT New antisense oligonucleotides that detect and modulate the expression of
PT Jun N-terminal kinase proteins - useful for treating hyperproliferative
PT diseases and inhibiting tumor growth in animals, and for modulating
PT protein phosphorylation by these proteins.
XX
PS Example 4; Page 92; 190pp; English.
XX
CC The invention relates to antisense oligonucleotides that detect and
CC modulate the expression of Jun N-terminal kinase (JNK) proteins. The
CC oligonucleotides specifically hybridize to a nucleic acid encoding a
CC JNK1, JNK2 or JNK3 protein, and which modulate expression of these
CC proteins. The oligonucleotides are useful for modulating JNK protein
CC expression and cell cycle progression in cultured cells or animal cells.
CC The oligonucleotides are also useful for modulating the phosphorylation
CC of a protein that has been phosphorylated by a JNK protein, and the
CC expression of a cellular protein that promotes one or more metastatic
CC events. The oligonucleotides also form pharmaceutical compositions for
CC treating animals with a hyperproliferative disease, and for inhibiting
CC tumor growth in an animal
XX
SQ Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;
Query Match 1.0%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1033 GACTTGGCTGGCCCG 1049

XX	Antisense oligonucleotide ISIS no.15354 to human JNK2 gene.
XX	
XX	Antisense; E-selectin; TNF alpha; cell adhesion;
XX	tumour necrosis factor alpha; phosphorothioate; methoxyethoxy; sepsis;
KW	rheumatoid arthritis; inflammatory; immune disease;
KW	inflammatory bowel disease; allergic contact dermatitis; psoriasis;
KW	diabetes; Grave's disease; allograft rejection; cancer; antibacterial;
KW	immunosuppressive; antipsoriatic; antidiabetic; antithyroid; cytostatic;
KW	dermatological; anti-allergic; Ha-ras; c-raf; c-Jun N-terminal Kinase;
KW	JNK; ss.
XX	
XX	Homo sapiens.
OS	
XX	
XX	Key Location/Qualifiers
FH	modified_base 1..6
FT	/*tag= a
FT	/mod_base= OTHER
FT	/note= "All bases are 2'-methoxyethoxy, additionally C
FT	bases are msc"
FT	
FT	modified_base 7..15
FT	/*tag= b
FT	/mod_base= OTHER
FT	/note= "Phosphorothioate internucleotide linkage"
FT	
FT	modified_base 16..20
FT	/*tag= c
FT	/mod_base= OTHER
FT	/note= "All bases are 2'-methoxyethoxy, additionally C
FT	bases are msc"
FT	
XX	WO200034303-A1.
PN	
XX	15-JUN-2000.
PD	
XX	
XX	08-DEC-1999; 99WO-US028965.
PF	
XX	
XX	10-DEC-1998; 98US-00209668.
PR	
XX	
XX	(ISIS-) ISIS PHARM INC.
PA	
XX	
PI	Monia BP, Xu XS;
PI	
XX	
DR	WPI; 2000-423367/36.
XX	
XX	Modulating cell adhesion molecule expression for treating immune or
PT	inflammatory diseases involves treating cell with specific inhibitor of
PT	Tumor Necrosis Factor alpha signaling molecule.
PT	
PS	Claim 36; Page 46; 10pp; English.
XX	
CC	A novel method for modulating cell adhesion molecule expression involves
CC	antisense inhibition of a tumour necrosis factor (TNF) alpha signalling
CC	molecule. In the method TNF alpha signalling molecules Ha-ras, c-raf and
CC	c-Jun N-terminal kinase (TNK)2 were inhibited by antisense
CC	oligonucleotides. In addition an antisense oligonucleotide to the cell
CC	adhesion molecule E-selectin was also examined. The present sequence is
CC	the JNK2 antisense oligonucleotide. The antisense oligonucleotides used
CC	in the method contained modifications, namely phosphorothioate linkages
CC	and 2'-methoxyethoxy bases. Some C residues also had a 5'methyl
CC	modification. Inhibitors of the TNF alpha signalling molecules have
CC	antibacterial, immunosuppressive, antipsoriatic, antidiabetic,
CC	antithyroid, cytostatic, dermatological, anti-allergic and
CC	anti-inflammatory activity. The antisense inhibitors may be useful for the
CC	treatment of sepsis, rheumatoid arthritis, inflammatory, immune disease,
CC	inflammatory bowel disease, allergic contact dermatitis, psoriasis,
CC	diabetes, Grave's disease, allograft rejection and cancer
XX	
XX	Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;
XX	
XX	Query Watch 1.08; Score 17; DB 1; Length 20;
XX	Best Local Similarity 100.0%; Pred. No. 2.1e-02;
XX	Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GACTTTGGCTGGCCCG 1049
 DB 20 GACTTTGGCTGGCCCG 4

RESULT 119

AAAC62885
 ID AAC62885 standard; DNA; 20 BP.

AC AAC62885;

XX 06-FEB-2001 (first entry)

DE JNK antisense oligonucleotide ISIS #14318.

XX Antisense; gene therapy; JNK2 protein; apoptosis; cancer;
 KW cellular hyperproliferation; Alzheimer's; Parkinson's disease;
 KW amyotrophic lateral sclerosis; retinitis; pigmentosa; epilepsy;
 KW myocardial infarction; stroke; obstructive jaundice; polycystic kidney;
 KW diabetes; Jun N-terminal kinase; ss.

OS Homo sapiens.

PN WO200059549-A1.

XX 12-OCT-2000.

XX 04-APR-2000; 2000WO-US008880.

XX 07-APR-1999; 99US-00287796.

XX (ISIS-) ISIS PHARM INC.

PI McKay R, Dean NM, Monia BP, Nero PS, Gaarde WA;

DR WPI; 2000-638427/61.

PT Novel methods for reducing apoptosis comprising contacting cells with
 PT antisense oligonucleotides, useful for treating apoptotic disorders, e.g.
 PT cancer.

PS Example 4; Page 135; 160pp; English.

XX The present invention relates to antisense oligonucleotides (AAC62844-
 CC C63000, AAA96093-A96099 and AAA07993) that hybridize specifically to a
 CC nucleotide encoding a Jun N-terminal kinase (JNK2) protein, resulting in
 CC decrease of JNK2 expression and leading to induction of apoptosis. The
 CC present sequence is one such antisense oligonucleotide. The
 CC oligonucleotides of the present invention are useful for treating
 CC diseases or conditions with reduced apoptosis, e.g. cancer and cellular
 CC hyperproliferation. The oligonucleotides may also be used to increase the
 CC stimulation of apoptotic proteins, e.g. for treating Alzheimer's or
 CC Parkinson's disease, amyotrophic lateral sclerosis, retinitis,
 CC pigmentosa, epilepsy, myocardial infarction, stroke, obstructive
 CC jaundice, polycystic kidney and diabetes. The present sequence may have a
 CC phosphorothioate backbone

XX Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 2.1e+02;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GACTTTGGCTGGCCCG 1049

DB 1 GACTTTGGCTGGCCCG 17

RESULT 120

AAAC62874/c
 ID AAC62874 standard; DNA; 20 BP.

XX AAC62874;

XX DT

XX 06-FEB-2001 (first entry)

DE JNK antisense oligonucleotide ISIS #12560.

XX Antisense; gene therapy; JNK2 protein; apoptosis; cancer;
 KW cellular hyperproliferation; Alzheimer's; Parkinson's disease;
 KW amyotrophic lateral sclerosis; retinitis; pigmentosa; epilepsy;
 KW myocardial infarction; stroke; obstructive jaundice; polycystic kidney;
 KW diabetes; Jun N-terminal kinase; ss.

OS Homo sapiens.

PN WO200059549-A1.

XX 12-OCT-2000.

XX 04-APR-2000; 2000WO-US008880.

XX 07-APR-1999; 99US-00287796.

XX (ISIS-) ISIS PHARM INC.

PI McKay R, Dean NM, Monia BP, Nero PS, Gaarde WA;

DR WPI; 2000-638427/61.

XX Novel methods for reducing apoptosis comprising contacting cells with
 PT antisense oligonucleotides, useful for treating apoptotic disorders, e.g.
 PT cancer.

PS Claim 3; Page 133; 160pp; English.

XX The present invention relates to antisense oligonucleotides (AAC62844-
 CC C63000, AAA96093-A96099 and AAA07993) that hybridize specifically to a
 CC nucleotide encoding a Jun N-terminal kinase (JNK2) protein, resulting in
 CC decrease of JNK2 expression and leading to induction of apoptosis. The
 CC present sequence is one such antisense oligonucleotide. The
 CC oligonucleotides of the present invention are useful for treating
 CC diseases or conditions with reduced apoptosis, e.g. cancer and cellular
 CC hyperproliferation. The oligonucleotides may also be used to increase the
 CC stimulation of apoptotic proteins, e.g. for treating Alzheimer's or
 CC Parkinson's disease, amyotrophic lateral sclerosis, retinitis,
 CC pigmentosa, epilepsy, myocardial infarction, stroke, obstructive
 CC jaundice, polycystic kidney and diabetes. The present sequence may have a
 CC phosphorothioate backbone

XX Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 2.1e+02;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GACTTTGGCTGGCCCG 1049

DB 20 GACTTTGGCTGGCCCG 4

RESULT 121

AAH23754/c
 ID AAH23754 standard; DNA; 20 BP.

XX AAH23754;

XX 13-AUG-2001 (first entry)

DE JNK1 antisense oligonucleotide, JNK2AS, (ISIS #12560).

XX JNK; jun kinase; antisense; cytostatic; cancer;
 KW 2'-O-methoxyethyl oligonucleotide; MOE; phosphorothioate; ss.
 XX Synthetic.

```

FH Key modified_base Location/Qualifiers
FT 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "This oligonucleotide is a 2'-O-methoxyethyl (MOE)
FT chimeric antisense oligonucleotide containing five
FT MOE/phosphodiester residues flanking a 2'-
FT deoxynucleotide/phosphorothioate region"
XX
XX WC200134792-A2.
XX
XX PD 17-MAY-2001.
XX
XX PF 10-NOV-2000; 2000WO-US030869.
XX
XX PR 12-NOV-1999; 99US-0165224P.
XX
XX PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
XX PI Potapova O, Gorospe M, Holbrook NJ;
XX WPI; 2001-335925/35.
XX
XX DR Use of Jun Kinase antisense mRNA for treating cancer by administering
XX PT vector comprising promoter operably linked to DNA sequence that encodes
XX PT the antisense mRNA to patient diagnosed with cancer.
XX
XX PS Claim 1; Page 41; 75pp; English.
XX
XX CC The present invention relates to the use of Jun Kinase (JNK) antisense
XX CC oligonucleotides for treating cancer and for screening compounds that
XX CC mimic or augment the effect of JNK antisense oligonucleotides treatment
XX CC for cancer. The present sequence is one such JNK antisense
XX CC oligonucleotide
XX
XX SQ Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GACTTTGGCTGGCCCG 1049
Db 20 GACTTTGGCTGGCCCG 4

RESULT 122
AAF99183/c
ID AAF99183 standard; DNA; 20 BP.
AC AAF99183;
XX
XX DT 12-JUN-2001 (first entry)
XX
XX DE Immunostimulatory nucleic acid #299.
XX
XX KW Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
XX KW immunostimulatory; tumour; viral infection; bacterial infection;
XX KW fungal infection; parasitic infection; cancer; asthma;
XX KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX
XX OS Synthetic.
XX
XX FN WO200122972-A2.
XX
XX PD 05-APR-2001.
XX
XX PF 25-SEP-2000; 2000WO-US026383.
XX
XX PR 25-SEP-1999; 99US-0156113P.
XX PR 27-SEP-1999; 99US-0156135P.
XX PR 23-AUG-2000; 2000US-0227436P.
XX

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PA (IOWA ) UNIV IOWA RES FOUND.
XX (COLE-) COLEY PHARM GMBH.
XX
XX PI Krieg AM, Schetter C, Vollmer J;
XX WPI; 2001-273485/28.
XX
XX PT Vaccinating against tumors, infectious diseases, allergies and asthma
XX PT using immunostimulatory Py-rich and TG nucleic acids.
XX
XX PS Claim 101; Page 44; 338pp; English.
XX
XX CC The present invention relates to a method for stimulating an immune
XX CC response. The method comprises administering an immunostimulatory nucleic
XX CC acid to a non-rodent subject in sufficient quantity to stimulate an
XX CC immune response. The present sequence is one such immunostimulatory
XX CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
XX CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
XX CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
XX CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
XX CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
XX CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
XX CC also useful for preventing cancer, asthma, infectious disease, allergy or
XX CC immune deficiency. The present sequence can also be used to redirect a
XX CC Th2 to a Th1 immune response and to activate immune cells. Note: the
XX CC present sequence may have a phosphorothioate backbone
XX
XX SQ Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GACTTTGGCTGGCCCG 1049
Db 20 GACTTTGGCTGGCCCG 4

RESULT 123
ABS77827/c
ID ABS77827 standard; DNA; 20 BP.
XX
XX AC ABS77827;
XX
XX DT 13-DEC-2002 (first entry)
XX
XX DE Angiogenesis inhibitory oligonucleotide #311.
XX
XX KW Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
XX KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
XX KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;
XX KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
XX KW rubeosis; Osler-Weber Syndrome; myocardial angiogenesis;
XX KW plaque neovascularisation; telangiectasia; haemophilic joint;
XX KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
XX KW scleroderma; hypertrophic scar.
XX
XX OS Synthetic.
XX
XX FN WO200253141-A2.
XX
XX PD 11-JUL-2002.
XX
XX PF 14-DEC-2001; 2001WO-US048458.
XX
XX PR 14-DEC-2000; 2000US-0255534P.
XX
XX PA (COLE-) COLEY PHARM GROUP INC.
XX
XX PI Bratzler RL;
XX WPI; 2002-566690/60.
XX

```

PT Inhibiting angiogenesis in a subject, involves administering at least one
PT antiangiogenic nucleic acid molecule to the subject.

PS Claim 2; Page 25; 276pp; English.

XX
XX The invention relates to inhibiting angiogenesis in a subject, comprising
XX administering at least one antiangiogenic nucleic acid molecule. Also
XX included is a kit comprising a first container housing the antiangiogenic
XX nucleic acids, and instructions for administering them to a subject
XX having a condition characterised by unwanted angiogenesis. The method is
XX useful for inhibiting angiogenesis associated with solid tumour growth,
XX tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
XX diabetic retinopathy, retinopathy of prematurity, macular degeneration,
XX corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
XX rubeosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque
XX neovascularisation, telangiectasia, haemophilic joints, angiofibroma,
XX wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
XX hypertrophic scars. The present sequence is an antiangiogenic nucleic
XX acid of the invention

XX Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GACTTGGCCTGGCCCG 1049

DB 20 GACTTGGCCTGGCCCG 4

RESULT 124

ABL39057/c

ID ABL39057 standard; DNA; 20 BP.

XX ABL39057;

DT 16-APR-2002 (first entry)

XX Immunostimulatory nucleic acid SEQ ID NO: 463.

XX Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
XX angiogenesis; metastasis; cytostatic; phosphorothioate backbone; ss.

XX Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..20

FT /tag= a

FT /mod_base= OTHER

FT /note= "phosphorothioate backbone"

XX WO200197843-A2.

XX 27-DEC-2001.

XX 22-JUN-2001; 2001WO-US020154.

XX 22-JUN-2000; 2000US-0213346P.

XX (IOWA) UNIV IOWA RES FOUND.

XX Weiner G, Hartmann G;

XX WPI; 2002-154611/20.

XX Treating or preventing cancer, such as basal cell carcinoma, comprises
PT administering immunostimulatory nucleic acids that induce expression of
PT cell surface antigens and antibodies to a subject having or at risk of
PT developing cancer.

XX Disclosure; Page 212; 312pp; English.

CC The present invention relates to methods for treating or preventing
CC cancer, involving administering to a subject having or at risk of
CC developing cancer immunostimulatory nucleic acids that induce expression
CC of cell surface antigens and antibodies. The methods are useful for
CC treating or preventing cancer such as basal cell carcinoma, bladder
CC cancer, bone cancer, brain and central nervous system (CNS) cancer,
CC breast cancer, cervical cancer, colon and rectum cancer, connective
CC tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx
CC cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
CC cancer, stomach cancer, testicular cancer, and uterine cancer. The
CC present sequence is an immunostimulatory oligonucleotide described in the
CC exemplification of the invention

XX Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 2.1e+02;

Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GACTTGGCCTGGCCCG 1049

DB 20 GACTTGGCCTGGCCCG 4

RESULT 125

ADA26589

ID ADA26589 standard; DNA; 20 BP.

XX ADA26589;

DT 20-NOV-2003 (first entry)

DE Human JNK2 sense control oligonucleotide ISIS12560.

XX ss; human; Jun N-terminal kinase, JNK1; JNK2; JNK3; cytostatic;
XX antiinflammatory; apoptosis; prostate cancer; prostate tumour;
XX inflammation; fibrosis; fibrotic disease; fibrotic scarring;
XX peritoneal adhesion; lung fibrosis; conjunctival scarring;
XX hyperproliferative disease; cancer; probe.

XX Homo sapiens.

XX US2003004120-A1.

XX 02-JAN-2003.

XX 31-JAN-2001; 2001US-00774809.

XX 13-AUG-1997; 97US-00910629.

XX 07-AUG-1998; 98US-00130616.

XX 07-APR-1999; 99US-00287796.

XX 15-SEP-1999; 99US-00396902.

XX (MCKA/) MCKAY R.

XX (DEAN/) DEAN N M.

XX (MONI/) MONIA B P.

XX (NERO/) NERO P.

XX (GAAR/) GAARDE W A.

XX Mckay R, Dean NM, Monia BP, Nero P, Gaarde WA;

XX WPI; 2003-311908/30.

XX New oligonucleotides which hybridizes to, and modulates the expression of
PT Jun N-terminal kinase, useful for treating a disease or condition
PT characterized by a reduction in apoptosis, e.g. prostate cancer,
PT inflammation or fibrosis.

XX Example 4; Page 26; 69pp; English.

XX The invention relates to an oligonucleotide (antisense, AS) comprising 8-

30 nucleotides connected by covalent linkages, where the oligonucleotide has a sequence specifically hybridisable with a nucleic acid encoding a Jun N-terminal kinase (JNK) protein and modulates the expression of the JNK protein. Also included are a pharmaceutical composition comprising the AS oligonucleotide (or its bioequivalent, and a pharmaceutical carrier), treating an animal having/suspected of having/prone to having a hyperproliferative disease (by administering to a prophylactic or therapeutic amount of the composition of the AS oligonucleotide), modulating the expression of a JNK protein in cells or tissues by contacting the cells or tissues with the AS oligonucleotide, modulating the cell cycle progression (or the phosphorylation of a protein phosphorylated by a JNK protein, or expression of a cellular protein that promotes one or more metastatic events in cultured cells or the cells of an animal) by administering the oligonucleotide to the cells, inhibiting the growth of a tumour in an animal by administering the oligonucleotide, inducing apoptosis in a cell by contacting a cell with an AS oligonucleotide for JNK2 and treating a human having a disease or condition associated with a JNK protein or characterised by a reduction in apoptosis by administering a prophylactic or therapeutic amount of the AS oligonucleotide. The antisense oligonucleotide is useful for treating a disease or condition characterised by a reduction in apoptosis, such as prostate cancer or prostate tumour, inflammation, fibrosis or fibrotic disease or condition (e.g. fibrotic scarring, peritoneal adhesions, lung fibrosis or conjunctival scarring), hyperproliferative disease or condition, such as cancer. The antisense oligonucleotides may also be used as research agents and diagnostic aids, to detect the presence of JNK protein-specific nucleic acids in a cell or tissue sample, and to study the function of one or more genes in the animal. The present sequence is a sense control oligonucleotide for antisense oligonucleotides targeting a human JNK.

Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GACTTTGGCCTGGCCCG 1049
Db 1 GACTTTGGCCTGGCCCG 17

RESULT 126
ADA26578/c
ID ADA26578 standard; DNA; 20 BP.
AC ADA26578;
AC ADA26578;
DT 20-NOV-2003 (first entry)
DE Human Jun N-terminal kinase, JNK2, antisense oligonucleotide IS1512560.
KW ss; human; Jun N-terminal kinase; JNK1; JNK2; JNK3; antisense;
KW cytostatic; antiinflammatory; apoptosis; prostate cancer;
KW prostate tumour; inflammation; fibrosis; fibrotic disease;
KW fibrotic scarring; peritoneal adhesion; lung fibrosis;
KW conjunctival scarring; hyperproliferative disease; cancer; probe.
XX Homo sapiens.
OS Homo sapiens.
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate linkages"
XX
FN US2003004120-A1.
XX
XX 02-JAN-2003.
XX 31-JAN-2001; 2001US-00774809.
XX 13-AUG-1997; 97US-00910629.
PR

PR 07-AUG-1998; 98US-00130616.
PR 07-APR-1999; 99US-00287796.
PR 15-SEP-1999; 99US-00396902.
XX (MCKA//) MCKAY R.
PA (DEAN//) DEAN N M.
PA (MONI//) MONIA B P.
PA (NERO//) NERO P.
PA (GAAR//) GAARDE W A.
XX
PI McKay R, Dean NM, Monia BP, Nero P, Gaarde WA;
XX WPI; 2003-311908/30.
XX
XX New oligonucleotides which hybridizes to, and modulates the expression of Jun N-terminal kinase, useful for treating a disease or condition characterized by a reduction in apoptosis, e.g. prostate cancer, inflammation or fibrosis.
XX
PS Claim 25; Page 25; 69pp; English.

CC The invention relates to an oligonucleotide (antisense, AS) comprising 8-30 nucleotides connected by covalent linkages, where the oligonucleotide has a sequence specifically hybridisable with a nucleic acid encoding a Jun N-terminal kinase (JNK) protein and modulates the expression of the JNK protein. Also included are a pharmaceutical composition comprising the AS oligonucleotide (or its bioequivalent, and a pharmaceutical carrier), treating an animal having/suspected of having/prone to having a hyperproliferative disease (by administering to a prophylactic or therapeutic amount of the composition of the AS oligonucleotide), modulating the expression of a JNK protein in cells or tissues by contacting the cells or tissues with the AS oligonucleotide, modulating the cell cycle progression (or the phosphorylation of a protein phosphorylated by a JNK protein, or expression of a cellular protein that promotes one or more metastatic events in cultured cells or the cells of an animal) by administering the oligonucleotide to the cells, inhibiting the growth of a tumour in an animal by administering the oligonucleotide, inducing apoptosis in a cell by contacting a cell with an AS oligonucleotide for JNK2 and treating a human having a disease or condition associated with a JNK protein or characterised by a reduction in apoptosis by administering a prophylactic or therapeutic amount of the AS oligonucleotide. The antisense oligonucleotide is useful for treating a disease or condition characterised by a reduction in apoptosis, such as prostate cancer or prostate tumour, inflammation, fibrosis or fibrotic disease or condition (e.g. fibrotic scarring, peritoneal adhesions, lung fibrosis or conjunctival scarring), hyperproliferative disease or condition, such as cancer. The antisense oligonucleotides may also be used as research agents and diagnostic aids, to detect the presence of JNK protein-specific nucleic acids in a cell or tissue sample, and to study the function of one or more genes in the animal. The present sequence is an antisense oligonucleotide targeting human JNK2.

XX Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GACTTTGGCCTGGCCCG 1049
Db 20 GACTTTGGCCTGGCCCG 4

RESULT 127
ACD99615/c
ID ACD99615 standard; DNA; 20 BP.
XX ACD99615;
AC ACD99615;
XX
XX 25-SEP-2003 (first entry)
XX Immunostimulatory nucleic acid #301.
XX

KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
KW antitumor; gene therapy; vaccine; non-allergic inflammatory disease;
KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
XX Synthetic.
OS US2003050268-A1.
PN US2003050268-A1.
PD 13-MAR-2003.
XX
XX 29-MAR-2002; 2002US-00112653.
PF
XX 29-MAR-2001; 2001US-0279642P.
PR
XX (KRIE/) KRIEG A. M.
PA (BERG/) BERG D. J.
PA
XX Krieg AM, Berg DJ;
PI WPI; 2003-521815/49.
XX
XX Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
PT disease by administering an immunostimulatory nucleic acid.
XX
XX Disclosure; Page 16; 229pp; English.
PS
XX The invention describes a method of treating non-allergic inflammatory
CC disease comprising administering to a subject having or at risk of
CC developing a non-allergic inflammatory disease an immunostimulatory
CC nucleic acid for prevention or treatment of the disease. The method is
CC useful for treating non-allergic inflammatory diseases, such as
CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
CC This sequence represents an immunostimulatory nucleic acid
XX
XX Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;
SQ
Query Match 1.0%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1033 GACTTTGGCCTGGCCCG 1049
DB 20 GACTTTGGCCTGGCCCG 4
RESULT 128
ADB36685/c
ID ADB36685 standard; DNA; 20 BP.
XX
AC ADB36685;
XX
XX 04-DEC-2003 (first entry)
DT
XX Immunostimulatory nucleic acid #299.
DE
XX ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;
KW hypo-responsive subject; immunostimulatory.
XX
XX Synthetic.
OS
XX US2003087848-A1.
PN
XX 08-MAY-2003.
PD
XX 02-FEB-2001; 2001US-00776479.
PF
XX 03-FEB-2000; 2000US-0179991P.
PR
XX (BRAT/) BRATZLER R L.
PA (PETE/) PETERSEN D M.
PA

PA (FOUR/) FOURON Y.
XX
XX Bratzler RL, Petersen DM, Fouron Y;
PI
XX WPI; 2003-657977/62.
DR
XX Treating and/or preventing allergy or asthma using an immunostimulatory
PT nucleic acid alone or in combination with an asthma/allergy medicament.
PT
XX Disclosure; Page 9; 221pp; English.
PS
XX The invention relates to a method of treating or preventing allergy or
CC asthma which comprises administering to a subject a poly-G nucleic acid
CC in an aerosol formulation. The methods and compositions of the present
CC invention are useful for diagnosing and/or treating asthma and allergy
CC especially in a hypo-responsive subject. The present sequence represents
CC an immunostimulatory nucleic acid of the invention.
XX
XX Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;
SQ
Query Match 1.0%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1033 GACTTTGGCCTGGCCCG 1049
DB 20 GACTTTGGCCTGGCCCG 4
RESULT 129
AAZ36748/c
ID AAZ36748 standard; DNA; 25 BP.
XX
AC AAZ36748;
XX
XX 13-MAR-2000 (first entry)
DT
XX PCR primer used to amplify GenBank accession number H27389.
DE
XX Stimulus-regulated nucleic acid; sequence profile; nucleic acid level;
KW differentially expressed nucleic acid; disease state; cancer;
KW autoimmune disease; infectious disease; aging; developmental disorder;
KW proliferative disorder; neurological disorder; toxicity; PCR primer;
KW treatment resistance; differential expression; drug discovery;
KW growth factor; epidermal growth factor; radiation; stress; pathogen; ss.
XX
XX Synthetic.
OS
XX Homo sapiens.
XX
XX WO9955913-A2.
PN
XX 04-NOV-1999.
PD
XX 27-APR-1999; 99WO-US009119.
PF
XX 27-APR-1998; 98US-0083331P.
PR
XX 27-AUG-1998; 98US-0098070P.
PR
XX 04-FEB-1999; 99US-0118624P.
XX
XX (KIMM-) KIMMEL CANCER CENT SIDNEY.
PA
XX McClelland M, Welsh J, Trenkle T;
PI
XX WPI; 2000-086388/07.
DR
XX Measuring expression of low abundance reduced complexity target nucleic
PT acid molecules.
PT
XX Example 3; Page 96; 187pp; English.
PS
XX PCR primers 236748-49 were used to amplify GenBank accession number
CC H27389, for confirmation of differential analysis. The amplified sequence
CC represents a target for the method of the invention. The specification

CC describes a method for measuring the level of two or more nucleic acid
CC molecules in a target. The method comprises contacting a probe with an
CC arbitrarily or statistically sampled target and detecting the amount of
CC specific binding of the target to the probe. The methods can be used to
CC identify differentially expressed nucleic acid molecules associated with
CC disease states, such as cancer, autoimmune disease, infectious disease,
CC aging, developmental disorder, proliferative disorder or neurological
CC disorder. Alternatively the methods can be used to assess the efficacy or
CC toxicity of or a resistance to a treatment. Also the methods can be used
CC to determine differential expression of nucleic acid molecules in
CC response to a stimulus, e.g. a chemical, drug or growth factor
CC (especially epidermal growth factor), radiation, stress or a pathogen.
CC The methods can also be used to determine co-regulated genes that can be
CC potential targets for drug discovery
XX
SQ Sequence 25 BP; 5 A; 4 C; 7 G; 9 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 25;
Best Local Similarity 80.0%; Pred. No. 2.7e+02;
Matches 20; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
QY 531 CAATAGCCCATCTTTGACAAAGCC 555
DB 25 CACTAGCAGCATCTTTGAAAGCAC 1

RESULT 130
ADB03815
ID ADB03815 standard; DNA; 25 BP.
XX ADB03815;
XX
XX 20-NOV-2003 (first entry)
XX Human MD27 scanning oligonucleotide SEQ ID 4801.
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
XX zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
XX chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
XX developmental disorder; ss.

XX Homo sapiens.
XX EP1281758-A2.
XX 05-FEB-2003.
XX 30-JUL-2002; 2002EP-00016874.
XX 02-AUG-2001; 2001US-00922181.
XX (AEOM-) AEOMICA INC.
XX Shannon M, Gu Y, Nguyen C;
XX WPI; 2003-423107/40.
XX New zinc finger-containing proteins and nucleic acids, useful in
XX manufacturing a medicament for treating or preventing a disorder
XX associated with decreased or increased expression or activity of MD23,
XX MD24, MD27 or MD212, e.g. cancer.
XX Example 8; SEQ ID NO 4801; 103pp; English.

XX The present invention relates to novel human zinc finger-containing
XX proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is
XX encoded at chromosome 7q22.1. MD24 is encoded at chromosome 6p21.3-22.2,
XX MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
XX 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
XX or in manufacturing a medicament for treating or preventing a disorder
XX associated with decreased or increased expression or activity of MD23,
XX MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
XX acids and proteins are also useful for diagnosing or monitoring a disease

CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.
XX

SQ Sequence 25 BP; 0 A; 11 C; 8 G; 6 T; 0 U; 0 Other;
Query Match 1.0%; Score 17; DB 1; Length 25;
Best Local Similarity 80.0%; Pred. No. 2.7e+02;
Matches 20; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
QY 922 CTGTTCCAGCTGCTCCGTCGCCCTGG 946
DB 1 CTGTTCCGCTGCCCTCGGGCTGG 25

RESULT 131
ADB03816
ID ADB03816 standard; DNA; 25 BP.
XX ADB03816;
XX 20-NOV-2003 (first entry)
XX Human MD27 scanning oligonucleotide SEQ ID 4802.
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
XX zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
XX chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
XX developmental disorder; ss.

XX Homo sapiens.
XX EP1281758-A2.
XX 05-FEB-2003.
XX 30-JUL-2002; 2002EP-00016874.
XX 02-AUG-2001; 2001US-00922181.
XX (AEOM-) AEOMICA INC.
XX Shannon M, Gu Y, Nguyen C;
XX WPI; 2003-423107/40.
XX New zinc finger-containing proteins and nucleic acids, useful in
XX manufacturing a medicament for treating or preventing a disorder
XX associated with decreased or increased expression or activity of MD23,
XX MD24, MD27 or MD212, e.g. cancer.
XX Example 8; SEQ ID NO 4802; 103pp; English.

XX The present invention relates to novel human zinc finger-containing
XX proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is
XX encoded at chromosome 7q22.1. MD24 is encoded at chromosome 6p21.3-22.2,
XX MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
XX 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
XX or in manufacturing a medicament for treating or preventing a disorder
XX associated with decreased or increased expression or activity of MD23,
XX MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
XX acids and proteins are also useful for diagnosing or monitoring a disease
XX caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
XX acids can also be used as probes to detect and characterize gross
XX alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are
XX useful in constructing microarrays for measuring gene expression. The
XX proteins are useful as therapeutic agents for gene therapy or as
XX vaccines. The present sequence was used to illustrate the invention.

XX Sequence 25 BP; 0 A; 11 C; 8 G; 6 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 25;
Best Local Similarity 80.0%; Pred. No. 2.7e+02;
Matches 20; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
QY 923 TGTTCAGCTGCTCGTGGCTGGC 947
DB 1 TGTTCAGCTGCTCGTGGCTGGC 25

RESULT 132
ADB03814
ID ADB03814 standard; DNA; 25 BP.
XX ADB03814;
AC ADB03814;
XX 20-NOV-2003 (first entry)
XX Human MDZ7 scanning oligonucleotide SEQ ID 4800.
DE Cytostatic; immunostimulant; gene therapy; vaccine; human;
XX zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX Homo sapiens.
OS Homo sapiens.
XX EP1281759-A2.
PN 05-FEB-2003.
PD 30-JUL-2002; 2002EP-00016874.
PF 02-AUG-2001; 2001US-00922181.
XX (ABOM-) AEOMICA INC.
XX Shannon M, Gu Y, Nguyen C;
PI WPI; 2003-423107/40.
XX New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MDZ3,
PT MD24, MD27 or MD212, e.g. cancer.
XX Example 8; SEQ ID NO 4800; 103pp; English.
PS The present invention relates to novel human zinc finger-containing
XX proteins and their coding sequences: MDZ3, MD24, MD27, MD212. MDZ3 is
CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
CC 15q26.1. The MDZ3, MD24, MD27, and MD212 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder
CC associated with decreased or increased expression or activity of MDZ3,
CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MDZ3, MD24, MD27, or MD212. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MDZ3, MD24, MD27, or MD212 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.
XX
SQ Sequence 25 BP; 0 A; 12 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 25;
Best Local Similarity 80.0%; Pred. No. 2.7e+02;
Matches 20; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
QY 921 CCTGTTCAGCTGCTCGTGGCTGGC 945
DB 1 CCTGTTCAGCTGCTCGTGGCTGGC 25

RESULT 133
ACI48161/c
ID ACI48161 standard; DNA; 25 BP.
XX ACI48161;
AC ACI48161;
XX 13-OCT-2003 (first entry)
XX Human microarray DNA oligonucleotide SEQ ID NO 48152.
DE EST; ss; probe; expressed sequence tag; microarray; gene expression;
XX genetic variation; biallelic marker; polymorphism; human;
KW cross-species comparison.
XX Homo sapiens.
OS Homo sapiens.
XX US2003104410-A1.
PN 05-JUN-2003.
PD 15-MAR-2002; 2002US-00098263.
PF 16-MAR-2001; 2001US-0276759P.
XX (AFFY-) AFFYMETRIX INC.
XX Mittmann MP;
PI WPI; 2003-567953/53.
XX New array of nucleic acid probes, useful for in situ hybridization, in
PT Southern, Northern or dot-blot hybridization to identify or detect the
PT sequence or specific mutations of any gene.
XX Claim 1; SEQ ID NO 48152; 9pp; English.
PS The invention discloses a microarray comprising a plurality of nucleic
XX acid probes including one of 2,018,500 fully defined sequences, or its
CC perfect match, perfect mismatch, antisense match or antisense mismatch.
CC Also disclosed is a method of gene expression analysis. The array is used
CC in monitoring gene expression levels by hybridisation to a DNA library,
CC in analysis of genetic variation or in hybridisation of tag-labelled
CC compounds. The nucleic acid probes are specifically designed for analysis
CC of at least one target sequence. The method of analysis comprises
CC hybridising at least one or more nucleic acids to at least two or more
CC nucleic acid probes and detecting the hybridisation. The nucleic acid
CC probes are attached to a solid support. The analysis comprises monitoring
CC gene expression levels, identifying biallelic markers or polymorphisms,
CC or family members of a gene and a cross-species comparison. Each of the
CC nucleic acids further comprises a tag sequence. The array of nucleic acid
CC probes is useful in in situ hybridisation, in Southern, Northern or dot-
CC blot hybridisation to identify or detect the sequence or specific
CC mutations of any gene, in mapping the 5' termini of mRNA molecules by
CC primer extensions or in screening cDNA or genomic libraries or subclones
CC for additional subclones containing segments of DNA that have been
CC isolated and previously sequenced. The sequence presented is one of the
CC nucleic acid probes incorporated in the microarray. Note: The sequence
CC data for this patent can also be obtained in electronic format directly
CC from USPTO at seqdata.uspto.gov/sequence.html
XX
SQ Sequence 25 BP; 5 A; 2 C; 6 G; 12 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 25;
Best Local Similarity 80.0%; Pred. No. 2.7e+02;
Matches 20; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
QY 787 AACATCGTTCAGCTACATGACATTA 811
DB 25 AATACGTCACACTACAGACATTA 1

AC ABA99030;
XX
DT 20-MAY-2002 (first entry)
XX
DE Human mammary gland enriched chemokine sense primer.
XX
KW Human; MEC; mammary gland enriched chemokine; chemokine; tumour; cancer;
KW cytosolic; antiinflammatory; inflammation; primer; ss.
XX
OS Homo sapiens.
XX
PN US2002009735-A1.
XX
PD 24-JAN-2002.
XX
XX 21-MAR-2001; 2001US-00813492.
FF
XX 23-MAR-2000; 2000US-0191654P.
PR
XX (LABO/) LABOW M A.
PA (MICK/) MICKANIN C S.
PA (BHAT/) BHATIA U.
XX
PI Labow MA, Mickanin CS, Bhatia U;
XX
XX WPI; 2002-187776/24.
XX
XX Regulating tumor or adverse bodily reaction, involves providing
PT therapeutic composition comprising a mammary gland chemokine, and
PT providing the composition to the tumor or to the area of adverse
PT reaction.
XX
XX Disclosure; Page 5; 11pp; English.
PS
XX The sequence represents a human mammary gland enriched chemokine (MEC)
CC sense primer. The primer was used in the invention to generate a fragment
CC encompassing the entire coding region of MEC. The invention relates to a
CC novel method for regulating a tumor or adverse bodily reaction,
CC comprising providing a therapeutic composition having a mammary gland
CC chemokine polypeptide. The polypeptide of the invention has cytostatic
CC and antiinflammatory activity. The method of the invention is useful for
CC regulating a tumor or adverse bodily reaction. The invention also
CC provides a method useful for detecting a tumor using a probe comprising
CC the polynucleotide or an antibody to the MEC. The adverse bodily
XX reactions include cancer and inflammation
XX
SQ Sequence 26 BP; 4 A; 6 C; 10 G; 6 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 26;
Best Local Similarity 80.0%; Pred. No. 2.8e+02;
Matches 20; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 941 GCGTGGCTACTGCGACCGGAGAA 965
Db 26 GCGTGGCTACTGCGACTGACGCA 2

RESULT 137
ABS64424
ID ABS64424 standard; DNA; 26 BP.
XX
AC ABS64424;
XX
DT 15-NOV-2002 (first entry)
XX
XX Human NOVX probe Ag2492.
DE
XX Human; NOVX; neurodegenerative disease; Alzheimer's disease; anxiety;
KW Parkinson's disease; Huntington's disease; neurological disorder;
KW schizophrenia; manic depression; mental retardation; angina pectoris;
KW cardiovascular disease; acute heart failure; myocardial infarction;
KW muscular disease; muscular disorder; retinal disease; photoreception;
KW deafness; keratinisation disorder; cancer; ovarian cancer; melanoma;

KW immunological disorder; inflammatory disease; immune disease; diabetes;
KW bacterial infection; fungal infection; protozoal infection; obesity;
KW viral infection; reproductive system disorder; metabolic disturbance;
KW anorexia; wasting disorder; chronic disease; infectious disease;
KW dyslipidaemia; probe; ss.
XX
OS Homo sapiens.
XX
PN WO200264791-A2.
XX
PD 22-AUG-2002.
XX
XX 10-DEC-2001; 2001WO-US048369.
FF
XX 08-DEC-2000; 2000US-0254329P.
PR 14-DEC-2000; 2000US-0255648P.
PR 15-MAY-2001; 2001US-0291037P.
PR 08-JUN-2001; 2001US-0297173P.
PR 29-JUN-2001; 2001US-0309258P.
PR 29-AUG-2001; 2001US-0315639P.
PR 01-OCT-2001; 2001US-0326393P.
XX
XX (CURA-) CURAGEN CORP.
XX
XX Alsobrook JP, Anderson DW, Burgess CE, Boldog FL, Casman SJ;
PI Colman SD, Edinger SR, Ellerman K, Gerlach V, Gorman L, Grosse WM;
PI Guo X, Herrmann JL, Kekuda R, Lefley DM, Li L, Macdougall JR;
PI Millet I, Pena CE, Peyman JA, Rastelli L, Rieger DK, Shimkets RA;
PI Smithson G, Spvtek KA, Stone DJ, Tchernev VT, Vernet CAM, Voss EZ;
PI Zerhusen BD, Zhong H, Zhong M;
XX
XX WPI; 2002-643486/69.
XX
XX New NOVX polypeptides and polynucleotides useful for treating or
PT preventing e.g. neurodegenerative diseases, neurological disorders,
PT cardiovascular diseases, muscular diseases and disorders, or
PT immunological diseases.
XX
XX Example 2; Page 247; 299pp; English.
XX
XX The present invention relates to new NOVX polypeptides. The polypeptides,
XX polynucleotides and antibodies are useful in the manufacture of a
XX medicament for treating or preventing neurodegenerative diseases (e.g.
XX Alzheimer's disease, Parkinson's disease, or Huntington's disease),
XX neurological disorders (e.g. anxiety, schizophrenia, manic depression or
XX mental retardation), cardiovascular disease (e.g. acute heart failure,
XX angina pectoris or myocardial infarction), muscular diseases and
XX disorders, retinal diseases (including those involving photoreception,
XX deafness and keratinisation disorders), cancer (e.g. ovarian cancer or
XX melanoma), immunological disorders, inflammatory and immune diseases,
XX bacterial, fungal, protozoal and viral infections, and reproductive
XX system disorders. The proteins of the invention may be used to screen
XX drugs or compounds that modulate the NOVX protein activity or expression,
XX as well as to treat disorders characterised by insufficient or excessive
XX production of NOVX protein or protein forms that have decreased or
XX aberrant activity compared to NOVX wild type protein, such as diabetes,
XX obesity, metabolic disturbances associated with obesity, anorexia and
XX wasting disorders associated with chronic diseases and various cancers,
XX infectious diseases and various dyslipidaemias. The nucleic acid
XX sequences of the invention may be used in chromosome mapping, identifying
XX an individual from minute biological samples (tissue typing), and in
XX forensic identification of a biological sample. The present nucleic acid
XX sequence represents a probe that was used in the methods of the invention
XX for detection of NOVX genes
XX
SQ Sequence 26 BP; 10 A; 9 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 26;
Best Local Similarity 80.0%; Pred. No. 2.8e+02;
Matches 20; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 767 TCACGGACCTCAACACGCCCAACAT 791
|||||

Db 2 TGAAGGCGCTAAACCCACCAACAT 26

RESULT 138
RAD62208/C
ID AAD62208 standard; DNA; 20 BP.
XX AC AAD62208;
XX 15-JAN-2004 (first entry)
XX Human haematopoietic cell tyrosine kinase antisense oligo ISIS #150763.
XX Haematopoietic cell; tyrosine kinase; hyperproliferative disorder;
KW cancer; therapy; inflammation; diabetes; viral infection; inflammation;
KW tumour; cytostatic; virucide; antisense therapy; antisense; human;
KW phosphorothioate backbone; ss.
XX Homo sapiens.
OS Synthetic.
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methyl cytidines"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) nucleotides"
XX US2003125275-A1.
XX 03-JUL-2003.
XX 04-DEC-2001; 2001US-00007010.
XX 04-DEC-2001; 2001US-00007010.
XX (ISIS-) ISIS PHARM INC.
XX Borchers AH, Dobie KW;
XX WPI; 2003-811000/76.
XX New antisense oligonucleotides targeted to nucleic acids encoding or
PT haematopoietic cell protein tyrosine kinase, useful for diagnosing or
PT treating cancer (e.g. leukemia), inflammation, diabetes or viral
PT infections.
XX Example 15; Page 26; 59pp; English.
XX The invention relates to a compound targetted to a nucleic acid molecule
CC encoding haematopoietic cell protein tyrosine kinase. The compound
CC inhibits the expression of haematopoietic cell protein tyrosine kinase
CC and it specifically hybridises with the nucleic acid molecule encoding
CC the tyrosine kinase or with at least an 8-nucleobase portion of an active
CC site on the nucleic acid molecule encoding the tyrosine kinase. The
CC antisense compounds are useful for modulating the expression of
CC haematopoietic cell protein tyrosine kinase and treating diseases or
CC conditions associated with the expression of the tyrosine kinase, such as
CC hyperproliferative disorders (e.g. cancer), inflammation, diabetes or a
CC viral infection. The antisense compounds are also useful for diagnostics,
CC therapeutics, prophylaxis, e.g. to prevent or delay infection,
CC inflammation or tumour formation, as research reagents and kits and in
CC distinguishing between functions of various members of a biological
CC pathway. The present sequence is human haematopoietic cell tyrosine
CC kinase antisense oligonucleotide

XX SQ Sequence 20 BP; 5 A; 7 C; 7 G; 1 T; 0 U; 0 Other;
Query Match 1.0%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 2.3e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1034 ACTTGGCCTGGCCGAGCC 1053
Db 20 ACTTGGCCTGGCCCGGTC 1
RESULT 139
AAT94989/C
ID AAT94989 standard; DNA; 21 BP.
XX AC AAT94989;
XX 02-APR-1998 (first entry)
XX Primer 3 for sequencing of human leukocyte antigen class I genes.
XX Human leukocyte antigen-C class I gene; HLA-C; exon 1; exon 5;
KW locus specific nucleic acid amplification; HLA typing; ss.
XX Synthetic.
OS Homo sapiens.
XX WO9731126-A1.
XX 28-AUG-1997.
XX 20-FEB-1996; 96WO-US002408.
XX 20-FEB-1996; 96WO-US002408.
XX (PEKE) PERKIN-ELMER CORP.
XX Johnston-Dow L, Chadwick RB, Parham P;
XX WPI; 1997-435175/40.
XX Amplification and sequencing primers specific for HLA class I genes -
PT useful for locus specific nucleic acid amplification for HLA typing.
XX Claim 10; Page 57; 105pp; English.
XX Sequencing primers AAT94987-92 were used to sequence PCR amplified human
CC leukocyte antigen (HLA) class I genes. The primers are designed to
CC hybridise to exon-intron borders of exons 2, 3 and 4 of the HLA genes.
CC PCR primers were used for locus specific nucleic acid amplification for
CC HLA typing. Typing HLA-A, -B or -C class I genes comprises providing a
CC sample DNA containing a HLA-A, -B or -C class I gene having a 1st and 2nd
CC exon and a target sequence, contacting the sample DNA with an
CC amplification primer including sequence complementary to sequence located
CC in exon 1 of the HLA-A, -B or -C gene, and a second amplification primer
CC sequence complementary to sequence located in exon 5 of the HLA-A, -B or
CC -C gene. The PCR product is sequenced using the above primers and the
CC determined DNA sequence compared with the DNA sequences of known HLA
CC types
XX SQ Sequence 21 BP; 4 A; 10 C; 2 G; 5 T; 0 U; 0 Other;
Query Match 1.0%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 2.4e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 352 GGGTCTGATGGGAGATGA 371
Db 21 GGGTCTGATGGGAGATGCA 2
RESULT 140

```

AAT95004/c
ID AAT95004 standard; DNA; 21 BP.
XX AC
XX AAT95004;
XX DT
XX 02-APR-1998 (first entry)
XX DE
XX Primer for sequencing exon 4 antisense strand of HLA class I genes.
XX KW
XX Human leukocyte antigen-C class I gene; HLA-C; exon 1; exon 5;
XX KW locus specific nucleic acid amplification; HLA typing; exon 4; ss.
XX OS
XX Synthetic.
XX OS Homo sapiens.
XX PN
XX WO9731126-A1.
XX XX
XX 28-AUG-1997.
XX XX
XX 20-FEB-1996; 96WO-US002408.
XX PF
XX 20-FEB-1996; 96WO-US002408.
XX PR
XX (PEKE ) PERKIN-ELMER CORP.
XX PA
XX Johnston-Dow L, Chadwick RB, Parham P;
XX PI
XX WPI; 1997-435175/40.
XX DR
XX Amplification and sequencing primers specific for HLA class I genes -
XX PT useful for locus specific nucleic acid amplification for HLA typing.
XX PT
XX Claim 29; Page 62; 105pp; English.
XX PS
XX The present sequencing primer was used to sequence PCR amplified human
XX CC leukocyte antigen (HLA) class I genes. The primer is designed to sequence
XX CC the antisense strand of exon 4, from the 5' exon-intron border. PCR
XX CC primers were used for locus specific nucleic acid amplification for HLA
XX CC typing. Typing HLA-A, -B or -C class I genes comprises providing a sample
XX CC DNA containing a HLA-A, -B or -C class I gene having a 1st and 2nd exon
XX CC and a target sequence, contacting the sample DNA with an amplification
XX CC primer including sequence complementary to sequence located in exon 1 of
XX CC the HLA-A, -B or -C gene, and a second amplification primer sequence
XX CC complementary to sequence located in exon 5 of the HLA-A, -B or -C gene.
XX CC The PCR product is sequenced using the above primers and the determined
XX CC DNA sequence compared with the DNA sequences of known HLA types
XX SQ
XX Sequence 21 BP; 4 A; 10 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 1.0%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 2.4e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 352 GGGTCTGATGGGAGAGTGA 371
DB 21 GGGTCTGATGGGAGAGTGA 2
|||||
RESULT 141
AAA90553/c
ID AAA90553 standard; DNA; 21 BP.
XX AC
XX AAA90553;
XX DT
XX 11-JAN-2001 (first entry)
XX DE
XX HLA class I gene sequencing primer #3.
XX KW
XX Human Leukocyte Antigen class I; HLA-A; antigen presentation; HLA typing;
XX KW organ transplantation; autoimmune disease; sequencing primer;
XX KW infectious disease susceptibility; chromosome 6p21.3; ss.
XX OS
XX Homo sapiens.

RESULT 141
AAA90553/c
ID AAA90553 standard; DNA; 21 BP.
XX AC
XX AAA90553;
XX DT
XX 11-JAN-2001 (first entry)
XX DE
XX HLA class I gene sequencing primer #9.
XX KW
XX Human Leukocyte Antigen class I; HLA-A; antigen presentation; HLA typing;
XX KW organ transplantation; autoimmune disease; sequencing primer;
XX KW infectious disease susceptibility; chromosome 6p21.3; ss.
XX OS
XX Homo sapiens.

```

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XX PN
XX US6103465-A.
XX PD
XX 15-AUG-2000.
XX PF
XX 03-OCT-1995; 95US-00538666.
XX PR
XX 14-FEB-1995; 95US-00390251.
XX PA
XX (PEKE ) PERKIN-ELMER CORP.
XX PI
XX Parham P, Johnston-Dow L, Chadwick RB;
XX XX
XX WPI; 2000-542544/49.
XX XX
XX Typing HLA class I genes for organ transplantation, involves contacting
XX PT the sample DNA containing HLA class I gene comprising two exons and a
XX PT target sequence, with amplification primers and detecting the amplicon.
XX PS
XX Claim 39; Col 38; 60pp; English.
XX CC
XX The present sequence is a sequencing primer for Human Leukocyte Antigen
XX CC (HLA) class I gene. The HLA class I genes are found on chromosome 6p21.3.
XX CC HLA class I proteins are found on the surface of almost all nucleated
XX CC cells and are involved in antigen presentation to immune system cells.
XX CC This primer can be used to type HLA class I genes: by carrying out PCR on
XX CC a sample DNA, comprising HLA class I gene, and detecting the amplicon
XX CC formed using a sequence-specific detection method e.g. DNA sequencing
XX CC (using the present sequence). The present sequence is useful for
XX CC discriminating among the HLA-A, HLA-B, and HLA-C genes and other related
XX CC class I genes and pseudogenes. In addition, the present sequence is
XX CC useful for organ transplantation studies, for the study of autoimmune
XX CC disease and for the determination of susceptibility to infectious disease
XX SQ
XX Sequence 21 BP; 4 A; 10 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 1.0%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 2.4e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 352 GGGTCTGATGGGAGAGTGA 371
DB 21 GGGTCTGATGGGAGAGTGA 2
|||||
RESULT 142
AAA90559/c
ID AAA90559 standard; DNA; 21 BP.
XX AC
XX AAA90559;
XX DT
XX 11-JAN-2001 (first entry)
XX DE
XX HLA class I gene sequencing primer #9.
XX KW
XX Human Leukocyte Antigen class I; HLA-A; antigen presentation; HLA typing;
XX KW organ transplantation; autoimmune disease; sequencing primer;
XX KW infectious disease susceptibility; chromosome 6p21.3; ss.
XX OS
XX Homo sapiens.
XX PN
XX US6103465-A.
XX PD
XX 15-AUG-2000.
XX PF
XX 03-OCT-1995; 95US-00538666.
XX PR
XX 14-FEB-1995; 95US-00390251.
XX PA
XX (PEKE ) PERKIN-ELMER CORP.
XX PI
XX Parham P, Johnston-Dow L, Chadwick RB;
XX XX

```

DR WPI; 2000-542544/49.
XX Typing HLA class I genes for organ transplantation, involves contacting
PT the sample DNA containing HLA class I gene comprising two exons and a
PT target sequence, with amplification primers and detecting the amplicon.
XX
PS Claim 10; Col 35; 60pp; English.
XX
CC The present sequence is a sequencing primer for Human Leukocyte Antigen
CC (HLA) class I gene. The HLA class I genes are found on chromosome 6p21.3.
CC HLA class I proteins are found on the surface of almost all nucleated
CC cells and are involved in antigen presentation to immune system cells.
CC This primer can be used to type HLA class I genes: by carrying out PCR on
CC a sample DNA, comprising HLA class I gene, and detecting the amplicon
CC formed using a sequence-specific detection method e.g. DNA sequencing
CC (using the present sequence). The present sequence is useful for
CC discriminating among the HLA-A, HLA-B, and HLA-C genes and other related
CC class I genes and pseudogenes. In addition, the present sequence is
CC useful for organ transplantation studies, for the study of autoimmune
CC disease and for the determination of susceptibility to infectious disease
XX
SQ Sequence 21 BP; 4 A; 10 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 1.0%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 2.4e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 352 GGGTCTGATGGGAGAGTCA 371
DB 21 GGGTCTGATGGGAGAGTCA 2

RESULT 143
AAQ62402
ID AAQ62402 standard; DNA; 23 BP.
XX
AC AAQ62402;
XX
DT 25-MAR-2003 (revised)
DT 18-NOV-1994 (first entry)
XX
DE Vector pVAC1 construction primer #8.
XX
KW Vector; pVAC1; pRC/RSV; leader sequence; termination signal; PCR;
KW fusion protein; pSfi/Not.Tag1; pElB leader; human; immunoglobulin; VH1;
KW single chain; Fv; murine antibody; retroviral; envelope; amplify;
KW plasmid; vaccine; polymerase chain reaction; ss.
XX
OS Synthetic.
XX
PN WO9408008-A1.
XX
PD 14-APR-1994.
XX
PF 04-OCT-1993; 93WO-GB002054.
XX
PR 02-OCT-1992; 92GB-C0020808.
XX
PA (MEDI-) MEDICAL RES COUNCIL.
XX
PI Hawkins RE, Russell SJ, Stevenson FK, Winter GP;
XX
DR WPI; 1994-135575/16.
XX
PT Modulating immune response to a disease marker - by administering a
PT vector which expresses the disease marker to interact with the immune
PT system.
XX
PS Disclosure; Page 33; 77pp; English.
XX
CC The sequences given in AAQ62395-449 are primers which were used in the
CC construction of the vector pVAC1. This vector is based on the
CC commercially available vector pRC/RSV. Leader sequences and termination

CC signals were introduced into the vector to allow for production of fusion
CC proteins. The vector, pSfi/Not.Tag1, was modified to replace the pElB
CC leader with the human immunoglobulin VH1 leader sequence that permits the
CC encoding of an SfiI cloning site without modification of the amino acid
CC sequence. This fragment was then cloned as an EcoRI/BlnI-HindIII
CC fragment into NotI/BlnI-HindIII cut vector pRC/RSV to give pVAC1. The
CC single chain Fv for an individual patient can be inserted within the VH1
CC leader sequence. This plasmid when encoding a single chain murine
CC antibody/retroviral envelope fusion protein can be used as a plasmid
CC vaccine and it induces a strong humoral response to the antibody moiety
CC in BALB/c mice. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 23 BP; 5 A; 4 C; 10 G; 4 T; 0 U; 0 Other;

Query Match 1.0%; Score 16.6; DB 1; Length 23;
Best Local Similarity 82.6%; Pred. No. 2.9e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1269 TGAGGAGACGTGGCCAGGATCC 1291
DB 1 TGAGGAGAGGTGACCAGGTTCC 23

RESULT 144
AAZ23985
ID AAZ23985 standard; DNA; 23 BP.
XX
AC AAZ23985;
XX
DT 25-JUN-1999 (first entry)
XX
DE Human hGT1 PCR primer 1.
XX
KW Polymorphic CAG repeat; hGT1; diagnosis; prognosis; schizophrenia; human;
KW transcription factor; neuroleptic activity; affective disorder;
KW manic depression; neurodevelopmental brain disease; detection;
KW phenotypic variability; PCR primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9915639-A1.
XX
PD 01-APR-1999.
XX
PF 18-SEP-1998; 98WO-CA000884.
XX
PR 19-SEP-1997; 97CA-02216057.
XX
PA (UWMC-) UNIV MCGILL.
XX
PI Rouleau GA, Joobor R, Benkelfat C;
XX
DR WPI; 1999-254703/21.
XX
PT A human GT1 gene containing a transcribed polymorphic CAG repeat, useful
PT in the diagnosis and treatment of schizophrenia.
XX
PS Disclosure; Page 16; 41pp; English.
XX
CC This invention describes novel human GT1 (hGT1) transcription factor gene
CC with neuroleptic activity containing a transcribed polymorphic CAG
CC repeat. Allelic variants of the hGT1 gene CAG repeat are associated with
CC schizophrenia, affective disorders (especially manic depression),
CC neurodevelopmental brain diseases or with phenotypic variability, with
CC respect to long term response to neuroleptic medication. Short (171-177
CC bp) allelic variants of CAG repeats in the hGT1 gene, are indicative of
CC non-severe schizophrenia and neuroleptic response in patients. Probes
CC and/or primers designed using the hGT1 gene can be used to identify genes
CC interacting with a biochemical pathway affected by the hGT1 gene. The
CC identified gene role can then be evaluated in psychiatric patients.
CC Therapeutic agents can be identified by administering the agent to a
CC transgenic mammal (or schizophrenic patients) and evaluating the

CC prevention and/or treatment of development of schizophrenia
XX
SQ Sequence 23 BP; 4 A; 6 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 1.0%; Score 16.6; DB 1; Length 23;
Best Local Similarity 82.6%; Pred. No. 2.9e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1470 GGGGAGCGGATCCACAATTC 1492
|||||
Db 1 GGGGAGCGGATCCAGAATTC 23

RESULT 145

AAA98718
ID AAA98718 standard; DNA; 23 BP.

AC AAA98718;

DT 08-FEB-2001 (first entry)

XX L. mexicana kinase PCR primer invPCR2.

DE MAP-kinase-kinase; LMWK; diagnosis; treatment; leishmaniasis; disease;
KW parasite; protozoal infection; vaccine; PCR primer; ss.

XX Leishmania mexicana.

PN DE19939070-A1.

XX 28-SEP-2000.

PF 18-AUG-1999; 99DE-01039070.

PR 26-MAR-1999; 99DE-01013905.

XX (PLAC) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.

PI Wiess M;

DR WPI; 2000-619872/60.

XX Use of nucleic acid encoding Leishmania kinases for identifying and
PT preparing diagnostic, preventative and therapeutic agents.

XX Example 1.7; Page 69; 98pp; German.

CC This invention describes a novel use of nucleic acid (I) that encodes
CC Leishmania kinases (II) for identification and preparation of agents for
CC diagnosis, treatment and/or prevention of leishmaniasis. The invention
CC also describes (a) use of (II) for identifying and producing agents for
CC diagnosis, treatment and/or prevention of leishmaniasis; (b) antibodies
CC (Ab) directed against (II); and (c) Leishmania mutants in which at least
CC one gene (I) is inactivated. (II) are essential for differentiation and
CC replication of the parasites, so are targets for development of specific
CC inhibitors. Mutants defective in (II) induce an immune response but do
CC not cause disease. (I) and (II) are useful for identifying and preparing
CC agents for diagnosis, treatment and/or prevention of protozoal
CC infections, particularly leishmaniasis. (I), (II) and (II)-specific
CC antibodies may themselves be used for diagnosis and treatment. Leishmania
CC mutants that are unable to express at least one (II) are useful as live
CC vaccines

XX Sequence 23 BP; 7 A; 7 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 1.0%; Score 16.6; DB 1; Length 23;
Best Local Similarity 82.6%; Pred. No. 2.9e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 994 AACCTGCTCATCAGCAGGG 1016
|||||
Db 1 AACCTGCTCATCAGCAACTGG 23

RESULT 146

ACF05113

ID ACF05113 standard; DNA; 23 BP.

XX ACF05113;

DT 06-NOV-2003 (first entry)

XX Retroviral vector pEV731 PCR primer EV976.

DE Vector; pEV731; immunodeficiency virus; HIV; anti-HIV; latency; PCR;
KW primer; ss.

XX Retrovirus.

PN WO2003054160-A2.

XX 03-JUL-2003.

PF 18-DEC-2002; 2002WO-US040698.

PR 19-DEC-2001; 2001US-0341727P.

XX (REGC) UNIV CALIFORNIA.

PI Verdin E, Jordan A;

DR WPI; 2003-577369/54.

XX Novel isolated cells that comprise transcription competent
PT immunodeficiency virus e.g. HIV-1, or immunodeficiency virus-based
PT retroviral vector integrated into its genome, useful for identifying
PT latent HIV activators.

XX Example 1; Page 32; 71pp; English.

CC The present sequence is that of primer EV976, which was used with primer
CC EVI333 (see ACF05114) in the PCR amplification of a 171 bp fragment
CC corresponding to the 3' end of the long terminal repeats (LTR) of
CC retroviral vector pEV731. The amplified fragment was used as a probe for
CC genomic DNA extracted from Jurkat cells infected with viral particles
CC containing the HIV-derived vector ITR-Tat-IRES-GFP. The invention
CC provides isolated cells that harbour a latent immunodeficiency virus that
CC is transcription competent, that can be reactivated, and that is an in
CC vitro model for latent HIV infection in vivo. The cells are useful for
CC investigating the nature of latency, and also in drug screening assays to
CC identify agents that activate latent HIV. Such agents are useful for
CC reducing the reservoir of latent HIV

XX Sequence 23 BP; 8 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 1.0%; Score 16.6; DB 1; Length 23;
Best Local Similarity 82.6%; Pred. No. 2.9e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1051 GCCAAGTCAATCCCAACAAAGAC.1073

Db 1 GCTAATTCACTCCCAACGAAGAC 23

RESULT 147

AAA07024

ID AAA07024 standard; DNA; 24 BP.

XX AAA07024;

DT 03-JUL-2000 (first entry)

XX KSR PCR primer, SEQ ID NO:21.

KW KSR; kinase suppressor of ras; CAP kinase; phosphorylation;
ceramide-activated protein kinase; lipopolysaccharide; LPS; endotoxin;

XX sphingomyelin signal transduction pathway; mutagenic; PCR primer; ss.
 OS Mus sp.
 XX US6040149-A.
 PN 21-MAR-2000.
 PD 10-JAN-1997; 97US-00785247.
 PF 11-JAN-1996; 96US-0009900P.
 XX (SLOK) SLOAN KETTERING INST CANCER RES.
 PA Zhang Y, Liu J, Kolesnick RN;
 XX WPI; 2000-270133/23.
 DR Novel method of identifying agents capable of inhibiting
 XX PT lipopolysaccharide induced threonine phosphorylation by a ceramide-
 PT activated protein kinase.
 XX Example VII; Col 57; 84pp; English.
 PS The invention relates to a novel method of determining whether an agent
 XX is capable of specifically inhibiting the ability of a ceramide-activated
 CC protein (CAP) kinase to phosphorylate the threonine residue in a
 CC polypeptide containing a Thr-Pro- or Thr-Leu-Pro motif. In particular,
 CC the peptide substrate that is specifically phosphorylated is Raf-1,
 CC epidermal growth factor receptor (EGFR), or suitable fragments thereof.
 CC The CAP kinase is membrane bound and has an apparent molecular weight of
 CC 100-110 kD. It is an upstream participant in a sphingomyelin signal
 CC transduction pathway which uses ceramide as a second messenger. This
 CC pathway is initiated by tumour necrosis factor-alpha (TNF-alpha) and
 CC interleukin-beta (IL-beta), causing the hydrolysis of sphingomyelin to
 CC ceramide. The ceramide in turn stimulates the kinase to phosphorylate
 CC protein substrates which can then mediate signal transduction. The CAP
 CC (LPS), which is stimulated by the bacterial endotoxin lipopolysaccharide
 CC (LPS), which is thought to mimic the second messenger function of
 CC ceramide. The methods are useful for identifying agents that inhibit
 CC lipopolysaccharide-induced Thr phosphorylation by CAP kinase. The agents
 CC identified using the method are useful for treating disorders associated
 CC with aberrant phosphorylation of target molecules by CAP kinase, e.g.,
 CC inflammatory disorders (such as rheumatoid arthritis), ulcerative
 CC colitis, graft versus host disease, lupus erythematosus, HIV, infection,
 CC disorders associated with poor stem cell growth, and septic shock.
 CC Sequences AAA07021-A07026 represent primers used in an exemplification of
 CC the present invention to generate mutant Flag peptide/murine KSR (kinase
 CC suppressor of ras) sequences via overlap extension PCR. KSR is a homologue
 CC of CAP kinase
 XX Sequence 24 BP; 6 A; 8 C; 7 G; 3 T; 0 U; 0 Other;
 SQ Query Match 1.0%; Score 16.6; DB 1; Length 24;
 Best Local Similarity 82.6%; Pred. No. 3.1e+02;
 Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1619 CAGACCGAGGCCGCCAGCAGCGAG 1641
 DB 2 CAGATCAAGGCTTCAGCGGCTG 24
 RESULT 148
 AAF64165/c
 ID AAF64165 standard; DNA; 24 BP.
 XX AAF64165;
 AC (first entry)
 DT 06-APR-2001
 XX Primer #105.
 DE Human; lipoprotein lipase; LPL; stenosis; ss.
 KW

XX Homo sapiens.
 OS WO200102606-A2.
 XX 11-JAN-2001.
 PD 30-JUN-2000; 2000WO-US018308.
 PF 02-JUL-1999; 99US-00347114.
 XX (CEDA-) CEDARS SINAI MEDICAL CENT.
 PA Taylor KD, Scheuner M, Rotter J, Yang H;
 XX WPI; 2001-138155/14.
 DR Genetic testing for determining non-responsiveness to statin drug in
 XX patients of a coronary artery disease, involves analyzing amplification
 PT products for homozygosity for a variant allele in the human lipoprotein
 PT lipase gene.
 XX Example 5; Page 26; 74pp; English.
 PS The present invention relates to detecting a genetic predisposition in a
 CC human subject for non-responsiveness to statin drug treatment, involving
 CC amplifying nucleic acids including a non-coding or untranslated region
 CC within the 3' end of the human lipoprotein lipase (LPL) gene from a
 CC tissue sample. The method is useful for determining which patients
 CC suffering from coronary artery disease, or which coronary artery bypass
 CC graft (CABG) patients, will likely not respond positively to statin drug
 CC treatment with respect to stenosis of a coronary artery or bypass graft
 XX Sequence 24 BP; 3 A; 6 C; 6 G; 9 T; 0 U; 0 Other;
 SQ Query Match 1.0%; Score 16.6; DB 1; Length 24;
 Best Local Similarity 82.6%; Pred. No. 3.1e+02;
 Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 848 ACCTGGACAGGACCTGAGCAG 870
 DB 23 ACCTGGACAGGACCTGAGCAG 1
 RESULT 149
 ADC10518
 ID ADC10518 standard; DNA; 24 BP.
 XX ADC10518;
 AC 18-DEC-2003 (first entry)
 DT Human NOVX polypeptide gene reverse primer SEQ ID NO: 537.
 DE ss; primer; cytostatic; antidiabetic; anorectic; cerebroprotective;
 XX neuroprotective; antiinflammatory; gene therapy; antisense therapy;
 KW thyromametic; NOVX; pathology; cancer; diabetes; obesity;
 KW endocrine disorder; CNS disorder; inflammatory disorder;
 KW chromosome mapping; tissue typing; predictive medicine.
 XX Homo sapiens.
 OS WO2003000842-A2.
 PN 03-JAN-2003.
 PD 04-JUN-2002; 2002WO-US017443.
 PF 04-JUN-2001; 2001US-0295607P.
 PR 04-JUN-2001; 2001US-0295681P.
 PR 06-JUN-2001; 2001US-0296404P.
 PR 06-JUN-2001; 2001US-0296418P.
 PR 07-JUN-2001; 2001US-0296575P.

PR 11-JUN-2001; 2001US-0297414P.
PR 12-JUN-2001; 2001US-0295573P.
PR 13-JUN-2001; 2001US-0297567P.
PR 14-JUN-2001; 2001US-0298285P.
PR 15-JUN-2001; 2001US-0298528P.
PR 18-JUN-2001; 2001US-0299133P.
PR 19-JUN-2001; 2001US-0299230P.
PR 21-JUN-2001; 2001US-0299949P.
PR 22-JUN-2001; 2001US-0300177P.
PR 26-JUN-2001; 2001US-0300883P.
PR 28-JUN-2001; 2001US-0301530P.
PR 28-JUN-2001; 2001US-0301550P.
PR 03-JUL-2001; 2001US-0302951P.
PR 31-JUL-2001; 2001US-0308890P.
PR 14-SEP-2001; 2001US-0322297P.
PR 25-SEP-2001; 2001US-0324669P.
PR 03-DEC-2001; 2001US-0337477P.
PR 14-DEC-2001; 2001US-0341562P.
PR 21-FEB-2002; 2002US-0358656P.
PR 21-FEB-2002; 2002US-0359122P.
PR 22-FEB-2002; 2002US-0358978P.
PR 22-FEB-2002; 2002US-0359034P.
PR 22-FEB-2002; 2002US-0359035P.
PR 22-FEB-2002; 2002US-0359121P.
PR 27-FEB-2002; 2002US-0359964P.
PR 01-MAR-2002; 2002US-0360858P.
PR 12-MAR-2002; 2002US-0363430P.
PR 12-MAR-2002; 2002US-0363430P.
PR 10-APR-2002; 2002US-0363676P.
PR 10-APR-2002; 2002US-0371346P.
PR 10-MAY-2002; 2002US-0379444P.
PR 04-JUN-2002; 2002US-00379444.
XX PA (CURA-) CURAGEN CORP.

(CURA-) CURAGEN CORP.

PI Agee ML, Anderson DW, Berghs C, Casman SJ, Catterton E;
PI Dipippo VA, Edinger SR, Eisen A, Ellerman K, Gangolli EA;
PI Gierlach NL, Gorman L, Guo X, Herrmann JL, Hjalt T, Ji W, Kekuda R;
PI Khramtsov NV, Li L, Liu X, Malyankar UN, Miller CE, Millet I;
PI Ort T, Padigaru M, Patturajan M, Pena CEA, Rastelli L, Rieger DK;
PI Rothenberg ME, Shenoy SG, Shinkets RA, Smithson G, Spaderna SK;
PI Szytek KA, Stone DJ, Vernet CAM, Zhong H, Zhong M, Alsobrook JP;
PI Burgess CE, Lepley DM;
XX WPI; 2003-210149/20.

XX New isolated NOVX polypeptides and nucleic acid molecules useful for
PT treating, preventing and diagnosing pathological conditions with NOVX-
PT associated disorders, such as cancer, obesity, diabetes and inflammatory
PT or CNS diseases.

XX Example B; SEQ ID NO 537; 772pp; English.

XX The invention relates to novel isolated polypeptides, mature form of the
CC polypeptide, a sequence that is 95% identical to the polypeptide or the
CC polypeptide comprising one or more conservative substitutions. The NOVX
CC polypeptide is useful for treating or preventing a pathology associated
CC with the polypeptide e.g. disorders associated with aberrant expression
CC or activity of the polypeptide, such as cancer, diabetes, obesity, and
CC endocrine, CNS and inflammatory disorders. They can also be used in
CC various detection and screening assays, chromosome mapping, tissue typing
CC and predictive medicine. This sequence corresponds to a primer used to
CC amplify and isolate the coding sequence for one of the polypeptides of
CC the invention.

XX Sequence 24 BP; 10 A; 3 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 1.0%; Score 16.6; DB 1; Length 24;
Best Local Similarity 82.6%; Pred. No. 3.1e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 959 GGACAGAGGTCTACACCGGAC 981
Db 1 GGAAGAGGTGATTTCACAGAC 23

RESULT 150

AAD60939
ID AAD60939 standard; DNA; 24 BP.

XX AC AAD60939;

XX DT 15-JAN-2004 (first entry)

XX DE BB1015 PCR primer used to isolate human SNORF7 receptor cDNA.

XX KW Human; SNORF7; receptor; PCR; primer; ss; inflammation;
XX autoimmune disease; neurological disorder.

XX OS Homo sapiens.

XX PN US2003109695-A1.

XX PD 12-JUN-2003.

XX PF 06-NOV-2002; 2002US-00289743.

XX PR 22-FEB-1999; 99US-00253999.

XX PR 17-AUG-1999; 99US-00375926.

XX PR 31-JUL-2000; 2000US-00629609.

XX PA (BORO/) BOROWSKY B E.

XX PA (KYAW/) KYAW H. A.

XX PA (BONI/) BONINI J A.

XX PI Borowsky BE, Kyaw H, Bonini JA;

XX DR WPI; 2003-801282/75.

XX PT New recombinant nucleic acid encoding a mammalian SNORF7 receptor for use
XX as a probe and for expressing SNORF7 receptor in transfected cells.

XX PS Disclosure; Page 3; Opp; English.

XX CC The invention relates to mammalian SNORF7 receptors and to nucleic acid
XX molecules encoding such receptors. Polynucleotides of the invention are
XX used as probes to obtain homologous nucleic acids from other species and
XX to detect the existence of nucleic acids having complementary sequences
XX in samples. They are also used to express SNORF7 receptor in transfected
XX cells. The receptors are also used to design drugs for treating such
XX diseases as inflammation, autoimmune diseases and neurological disorders.
XX The present sequence is a PCR primer used to identify and isolate human
XX SNORF7 receptor cDNA

XX SQ Sequence 24 BP; 5 A; 8 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 1.0%; Score 16.6; DB 1; Length 24;
Best Local Similarity 82.6%; Pred. No. 3.1e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 951 CTGCCACCGGACAGGTCTAC 973

Db 2 CTACCACTGCAGAGGTCTGC 24

RESULT 151

AAH39887/C
ID AAH39887 standard; DNA; 25 BP.

XX AC AAH39887;

XX DT 14-AUG-2001 (first entry)

XX DE SNP specific SNPE primer SEQ ID 2683.

XX KW Single nucleotide polymorphism; SNP; single nucleotide primer extension;
XX SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer;

KW Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;
KW polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;
KW acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;
KW inflammation; forensic investigation; paternity analysis; primer; ss.
XX
OS Homo sapiens.
XX
PN WO200129262-A2.
XX
PD 26-APR-2001.
XX
PF 13-OCT-2000; 2000WO-US028436.
XX
PR 15-OCT-1999; 99US-0160096P.
XX
PA (ORCH-) ORCHID BIOSCIENCES INC.
XX
PI Picoult-Newburg L, Pohl M;
XX
DR WPI; 2001-290930/30.
XX
PT New genotyping oligonucleotide, useful for detecting the presence,
PT absence or identity of single polynucleotide polymorphism in a nucleic
PT acid sample.
XX
PS Claim 1; Page 63; 83pp; English.
XX
CC Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide
CC primer extension (SNPE) primers, and the sequences of regions flanking
CC sites of single nucleotide polymorphisms SNPs. The present invention
CC includes kits for determining the presence or absence of a SNP, using the
CC oligonucleotides of the invention. The PCR primers are used to amplify a
CC SNP flanking sequence, the SNPE primer is used as a genotyping primer.
CC The oligonucleotides are useful for genotyping a nucleic acid sample by
CC performing a single-nucleotide primer extension reaction. The
CC oligonucleotides are useful for determining the presence, absence or
CC identity of a SNP and for genotyping nucleic acid samples, for e.g. to
CC assess by association analysis the genotype of an individual or group of
CC individuals, having a pathological phenotypic trait suspected of being
CC caused by one or more SNPs. Phenotypic traits include diseases e.g.
CC agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
CC dystrophy, familial hypercholesterolaemia, polycystic kidney disease,
CC osteogenesis imperfecta and acute intermittent porphyria. Phenotypic
CC traits also include symptoms of or susceptibility to multifactorial
CC disease of which a component is or may be genetic such as autoimmune
CC diseases, including, rheumatoid arthritis, multiple sclerosis,
CC inflammation, cancer, nervous system diseases and infection by pathogenic
CC microorganism. The method is also useful in forensic investigations and
CC paternity analysis. The present sequence represents a single nucleotide
CC primer extension (SNPE) primer specific for a human SNP containing DNA
CC sequence
XX
SQ Sequence 25 BP; 6 A; 9 C; 3 G; 7 T; 0 U; 0 Other;
Query Match 1.0%; Score 16.6; DB 1; Length 25;
Best Local Similarity 82.6%; Pred. No. 3.2e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 874 CTGGATGACTGTGGGACATCAT 896
DB 24 CTGGGTGACTGAGGGAACAT 2
RESULT 152
ABN15301
ID ABN15301 standard; DNA; 25 BP.
XX
AC ABN15301;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMLP-1 25-mer scanning SEQ ID NO:5 sequence SEQ ID NO:15293.
XX

KW Human; genome-derived myosin-like protein 1; GDMLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016981.
XX
PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 05-FEB-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
PA (ABOM-) ABOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR WPI; 2002-179446/23.
XX
PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
XX Disclosure; SEQ ID NO 15293; 214pp; English.
XX The present invention describes a human genome-derived myosin-like
XX protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
XX 1 can be used in gene therapy and vaccine production. The hGDMLP-1
XX nucleic acids can be used as probes to detect, characterise and quantify
XX hGDMLP-1 nucleic acids in samples, as amplification substrates, to
XX provide initial substrates for the recombinant engineering of hGDMLP-1
XX protein variants having desired phenotypic improvements, and for
XX expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
XX used as immunogens to raise antibodies that specifically recognise hGDMLP
XX -1 proteins, as standards in assays used to determine the concentration
XX and/or amount specifically of hGDMLP proteins, as specific biomolecule
XX capture probes for surface-enhanced laser desorption/ionisation, as
XX therapeutic supplement in patients having specific deficiency in hGDMLP-1
XX production, and in vaccines or for replacement therapy. The
XX polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
XX disorder associated with the expression of hGDMLP-1, in particular heart
XX and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
XX The present sequence represents an oligomer used in the screening of the
XX hGDMLP-1 sequence in the exemplification of the present invention. N.B.
XX The sequence data for this patent did not form part of the printed
XX specification, but was obtained in electronic format directly from WIPO
XX at ftp.wipo.int/pub/published_pct_sequence
SQ Sequence 25 BP; 2 A; 11 C; 5 G; 7 T; 0 U; 0 Other;
Query Match 1.0%; Score 16.6; DB 1; Length 25;
Best Local Similarity 82.8%; Pred. No. 3.2e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 555 CCTCAGCCGCCGCTCGTCGTG 577
DB 3 CCTCATCTCGGCTCCATCGTG 25

RESULT 153
ABN15305
ID ABN15305 standard; DNA; 25 BP.
XX AC
XX ABN15305;
XX 29-MAY-2002 (first entry)
DT DT
DE Human GDMPLP-1 25-mer scanning SEQ ID NO:15297.
XX
XX Human; genome-derived myosin-like protein 1; GDMPLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
XX Homo sapiens.
XX
XX WO200192524-A2.
PN
XX
XX 06-DEC-2001.
PD
XX
XX 25-MAY-2001; 2001WO-US016981.
PF
XX
XX 26-MAY-2000; 2000US-0207456P.
PR
XX 21-SEP-2000; 2000US-0234687P.
PR
XX 27-SEP-2000; 2000US-0236359P.
PR
XX 04-OCT-2000; 2000GB-00024263.
PR
XX 30-JAN-2001; 2001WO-US000661.
PR
XX 30-JAN-2001; 2001WO-US000662.
PR
XX 30-JAN-2001; 2001WO-US000663.
PR
XX 30-JAN-2001; 2001WO-US000664.
PR
XX 30-JAN-2001; 2001WO-US000665.
PR
XX 30-JAN-2001; 2001WO-US000666.
PR
XX 30-JAN-2001; 2001WO-US000667.
PR
XX 30-JAN-2001; 2001WO-US000668.
PR
XX 30-JAN-2001; 2001WO-US000669.
PR
XX 05-FEB-2001; 2001US-0266860P.
XX
XX (AEOM-) AEOMICA INC.
PA
XX
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
PI
XX WPI; 2002-179446/23.
DR
XX
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
XX
XX Disclosure; SEQ ID NO 15297; 214pp; English.
PS
XX
XX The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMPLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption/ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMPLP-1, in particular heart
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence

XX
SQ Sequence 25 BP; 2 A; 11 C; 4 G; 8 T; 0 U; 0 Other;
Query Match 1.0%; Score 16.6; DB 1; Length 25;
Best Local Similarity 82.6%; Pred. No. 3.2e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 557 TCAGCGCGCGCTCCGTCGTCGTC 579
DB 1 TCATCTCCGCGCTCCATCGTCGTC 23
RESULT 154
ABV82333/C
ID ABV82333 standard; DNA; 25 BP.
XX AC ABV82333;
XX
XX 03-JAN-2003 (first entry)
DT
XX Human HTPL scanning oligonucleotide SEQ ID 3579.
DE
XX Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
KW human testis expressed Patched like protein; testis; adrenal; liver;
KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX
XX Homo sapiens.
XX
XX EPI229046-A2.
PN
XX 07-AUG-2002.
PD
XX
XX 28-JAN-2002; 2002EP-00001167.
PF
XX 30-JAN-2001; 2001WO-US000663.
PR
XX 30-JAN-2001; 2001WO-US000664.
PR
XX 30-JAN-2001; 2001WO-US000665.
PR
XX 30-JAN-2001; 2001WO-US000667.
PR
XX 30-JAN-2001; 2001WO-US000668.
PR
XX 30-JAN-2001; 2001WO-US000669.
PR
XX 23-MAY-2001; 2001US-00864761.
PR
XX 09-OCT-2001; 2001US-0327898P.
XX
XX (AEOM-) AEOMICA INC.
PA
XX
XX Zhan J;
PI
XX
XX WPI; 2002-676582/73.
DR
XX
XX Novel isolated human testis expressed Patched like protein (HTPL), useful
PT for identifying agonist and antagonist and specific binding partners, and
PT for treating subjects having defects in HTPL.
XX
XX Example 2; Page 533; 718pp; English.
PS
XX The present invention relates to human testis expressed Patched like
CC protein (HTPL, see ABV78759 to ABV78762 and ABV8519 to ABV8520). HTPL
CC has two isoforms, with a few single base pair differences between the
CC two. One of the single base pair changes introduces a premature stop
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC shares an overall structure organisation with the Patched protein. The
CC shared structural features strongly imply that HTPL plays a role similar
CC to that of Patched, and is a potential tumour suppressor. HTPL is
CC important in regulating male germ cell development, and the HTPL gene was
CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are
CC useful for diagnosing a disorder caused by mutation in HTPL, and in
CC therapy and manufacture of a medicament for treatment or prevention of
CC such disorder associated with decreased expression or activity of human
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC clinically useful diagnostic markers and potential therapeutic agents for

CC male infertility and cancer. The present oligonucleotide was used in an
CC example from the invention
XX
SQ Sequence 25 BP; 8 A; 10 C; 2 G; 5 T; 0 U; 0 Other;
Query Match 1.0%; Score 16.6; DB 1; Length 25;
Best Local Similarity 82.6%; Pred. No. 3.2e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 219 CCTGATGAGAGTGGTGGTGGT 241
DB 25 CCAGGATGTTAGTGGTGGTGGT 3
RESULT 155
ABV82338/c
ID ABV82338 standard; DNA; 25 BP.
XX
AC ABV82338;
XX
DT 03-JAN-2003 (first entry)
XX
DE Human HTPL scanning oligonucleotide SEQ ID 3584.
XX
KW Human; gene therapy; tumor suppressor; HTPL; chromosome 10p12.1;
KW human testis expressed Patched like protein; testis; adrenal; liver;
KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX
OS Homo sapiens.
XX
PN EP1229046-A2.
XX
PD 07-AUG-2002.
XX
PF 28-JAN-2002; 2002EP-00001167.
XX
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 23-MAY-2001; 2001US-00864761.
PR 03-OCT-2001; 2001US-0327998P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Zhan J;
XX
DR WPI; 2002-676582/73.
XX
PT Novel isolated human testis expressed Patched like protein (HTPL), useful
PT for identifying agonist and antagonist and specific binding partners, and
PT for treating subjects having defects in HTPL.
XX
PS Example 2; Page 533; 718pp; English.
XX
CC The present invention relates to human testis expressed patched like
CC protein (HTPL, see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL
CC has two isoforms, with a few single base pair differences between the
CC two. One of the single base pair changes introduces a premature stop
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC shares an overall structure organisation with the Patched protein. The
CC shared structural features strongly imply that HTPL plays a role similar
CC to that of Patched, and is a potential tumour suppressor. HTPL is
CC important in regulating male germ cell development, and the HTPL gene was
CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are
CC useful for diagnosing a disorder caused by mutation in HTPL, and in
CC therapy and manufacture of a medicament for treatment or prevention of
CC such disorder associated with decreased expression or activity of human
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,

CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC clinically useful diagnostic markers and potential therapeutic agents for
CC male infertility and cancer. The present oligonucleotide was used in an
CC example from the invention
XX
SQ Sequence 25 BP; 7 A; 10 C; 2 G; 6 T; 0 U; 0 Other;
Query Match 1.0%; Score 16.6; DB 1; Length 25;
Best Local Similarity 82.6%; Pred. No. 3.2e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 216 AGCCTGGATGAGAGTGGTGGTGGT 238
DB 23 AGCCAGGATGTTAGTGGTGGT 1
RESULT 156
ABS75865
ID ABS75865 standard; DNA; 25 BP.
XX
AC ABS75865;
XX
DT 27-DEC-2002 (first entry)
XX
DE Human PAPP-Ea associated 25-mer SEQ ID 1391.
XX
KW PAPP-E; human; pregnancy associated plasma protein E; abortive;
KW contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;
KW dysgenetic pregnancy; primer; ss.
XX
OS Homo sapiens.
XX
PN US2002102252-A1.
XX
PD 01-AUG-2002.
XX
PF 06-APR-2001; 2001US-00827998.
XX
PR 26-MAY-2000; 2000US-0207456P.
XX
PA (GUY/) GU Y.
PA (SHAN/) SHANNON M E.
XX
PI Gu Y, Shannon ME;
XX
DR WPI; 2002-697817/75.
XX
PT New isolated nucleic acid encoding an isoform of human pregnancy
PT associated plasma protein E, for preventing or aborting pregnancy.
XX
PS Example 2; Page 258; 353pp; English.
XX
CC This invention describes a novel isolated nucleic acid that encodes one
CC of three new isoforms of human pregnancy associated plasma protein E,
CC hPAPP-E. The products of the invention have abortive and contraceptive
CC activity and can be used for gene therapy or in a vaccine. The nucleic
CC acid, polypeptide encoded by it, or antibody to the polypeptide can be
CC used in pharmaceutical compositions or vaccines for preventing or
CC aborting pregnancy. PAPP-E is used in the antenatal diagnosis of
CC dysgenetic pregnancies. The nucleic acids are used as probes to assess
CC the level of PAPP-E isoform mRNA in chorionic villus samples, and the
CC antibodies can be used to assess the expression levels of PAPP-E isoform
CC proteins in chorionic villus samples, to diagnose dysgenetic pregnancies
CC antenatally. This sequence represents an oligomer used in scanning the
CC human PAPP-E genes described in the disclosure of the invention
XX
SQ Sequence 25 BP; 10 A; 4 C; 9 G; 2 T; 0 U; 0 Other;
Query Match 1.0%; Score 16.6; DB 1; Length 25;
Best Local Similarity 82.6%; Pred. No. 3.2e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1005 CAACGAGAGGGGAGAGCTCAAGC 1027

PF 15-MAR-2002; 2002US-00098263.
XX
PR 16-MAR-2001; 2001US-0276759P.
XX
PA (AFFY-) AFFYMETRIX INC.
XX
PI Mittmann MP;
XX
PI WPI; 2003-567953/53.
XX
DR New array of nucleic acid probes, useful for in situ hybridization, in
XX Southern, Northern or dot-blot hybridization to identify or detect the
XX sequence or specific mutations of any gene.
XX
PS Claim 1; SEQ ID NO 91054; 9pp; English.
XX
CC The invention discloses a microarray comprising a plurality of nucleic
XX acid probes including one of 2,018,500 fully defined sequences, or its
XX perfect match, antisense match or antisense mismatch.
XX Also disclosed is a method of gene expression analysis. The array is used
XX in monitoring gene expression levels by hybridisation to a DNA library,
XX in analysis of genetic variation or in hybridisation of tag-labelled
XX compounds. The nucleic acid probes are specifically designed for analysis
XX of at least one target sequence. The method of analysis comprises
XX hybridising at least one or more nucleic acids to at least two or more
XX nucleic acid probes and detecting the hybridisation. The nucleic acid
XX probes are attached to a solid support. The analysis comprises monitoring
XX gene expression levels, identifying biallelic markers or polymorphisms,
XX or family members of a gene and a cross-species comparison. Each of the
XX nucleic acids further comprises a tag sequence. The array of nucleic acid
XX probes is useful in situ hybridisation, in Southern, Northern or dot-
XX blot hybridisation to identify or detect the sequence or specific
XX mutations of any gene, in mapping the 5' termini of mRNA molecules by
XX primer extensions or in screening cDNA or genomic libraries or subclones
XX for additional subclones containing segments of DNA that have been
XX isolated and previously sequenced. The sequence presented is one of the
XX nucleic acid probes incorporated in the microarray. Note: The sequence
XX data for this patent can also be obtained in electronic format directly
XX from USPTO at seqdata.uspto.gov/sequence.html
XX
SQ Sequence 25 BP; 6 A; 4 C; 9 G; 6 T; 0 U; 0 Other;
Query Match 1.0%; Score 16.6; DB 1; Length 25;
Best Local Similarity 82.6%; Pred. No. 3.2e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1469 TGGGGGAGCGGATCCAGAACTT 1491
XX |||||
DB 2 TGGTGGATCGGATCCAGAACTT 24
XX
RESULT 160
ACI47780/c
ID ACI47780 standard; DNA; 25 BP.
XX
AC ACI47780;
XX
DT 13-OCT-2003 (first entry)
XX
DE Human microarray DNA oligonucleotide SEQ ID NO 47771.
XX
DE EST; ss; probe; expressed sequence tag; microarray; gene expression;
XX genetic variation; biallelic marker; polymorphism; human;
XX cross-species comparison.
XX
OS Homo sapiens.
XX
PN US2003104410-A1.
XX
PD 05-JUN-2003.
XX
PF 15-MAR-2002; 2002US-00098263.
XX
PR 15-MAR-2002; 2002US-00098263.
XX

PR 16-MAR-2001; 2001US-0276759P.
XX
PA (AFFY-) AFFYMETRIX INC.
XX
PI Mittmann MP;
XX
PI WPI; 2003-567953/53.
XX
DR New array of nucleic acid probes, useful for in situ hybridization, in
XX Southern, Northern or dot-blot hybridization to identify or detect the
XX sequence or specific mutations of any gene.
XX
PS Claim 1; SEQ ID NO 47771; 9pp; English.
XX
CC The invention discloses a microarray comprising a plurality of nucleic
XX acid probes including one of 2,018,500 fully defined sequences, or its
XX perfect match, antisense match or antisense mismatch.
XX Also disclosed is a method of gene expression analysis. The array is used
XX in monitoring gene expression levels by hybridisation to a DNA library,
XX in analysis of genetic variation or in hybridisation of tag-labelled
XX compounds. The nucleic acid probes are specifically designed for analysis
XX of at least one target sequence. The method of analysis comprises
XX hybridising at least one or more nucleic acids to at least two or more
XX nucleic acid probes and detecting the hybridisation. The nucleic acid
XX probes are attached to a solid support. The analysis comprises monitoring
XX gene expression levels, identifying biallelic markers or polymorphisms,
XX or family members of a gene and a cross-species comparison. Each of the
XX nucleic acids further comprises a tag sequence. The array of nucleic acid
XX probes is useful in situ hybridisation, in Southern, Northern or dot-
XX blot hybridisation to identify or detect the sequence or specific
XX mutations of any gene, in mapping the 5' termini of mRNA molecules by
XX primer extensions or in screening cDNA or genomic libraries or subclones
XX for additional subclones containing segments of DNA that have been
XX isolated and previously sequenced. The sequence presented is one of the
XX nucleic acid probes incorporated in the microarray. Note: The sequence
XX data for this patent can also be obtained in electronic format directly
XX from USPTO at seqdata.uspto.gov/sequence.html
XX
SQ Sequence 25 BP; 6 A; 4 C; 8 G; 7 T; 0 U; 0 Other;
Query Match 1.0%; Score 16.6; DB 1; Length 25;
Best Local Similarity 82.6%; Pred. No. 3.2e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 815 ACACGAGAGAGTCCCTCACCCCTT 837
XX |||||
DB 24 AAACAGAGAGGTCTCTCACCCCTT 2
XX
RESULT 161
ACI51208/c
ID ACI51208 standard; DNA; 25 BP.
XX
AC ACI51208;
XX
DT 13-OCT-2003 (first entry)
XX
DE Human microarray DNA oligonucleotide SEQ ID NO 51199.
XX
DE EST; ss; probe; expressed sequence tag; microarray; gene expression;
XX genetic variation; biallelic marker; polymorphism; human;
XX cross-species comparison.
XX
OS Homo sapiens.
XX
PN US2003104410-A1.
XX
PD 05-JUN-2003.
XX
PF 15-MAR-2002; 2002US-00098263.
XX
PR 16-MAR-2001; 2001US-0276759P.
XX

(AFFY-) AFFYMETRIX INC.

Mittmann MP;

WPI; 2003-567953/53.

New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence or specific mutations of any gene.

Claim 1; SEQ ID NO 51199; 9pp; English.

The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch. Also disclosed is a method of gene expression analysis. The array is used in monitoring gene expression levels by hybridisation to a DNA library, in analysis of genetic variation or in hybridisation of tag-labelled compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises hybridising at least one or more nucleic acids to at least two or more nucleic acid probes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying allelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid probes is useful in in situ hybridisation, in Southern, Northern or dot-blot hybridisation to identify or detect the sequence or specific mutations of any gene, in mapping the 5' termini of mRNA molecules by primer extensions or in screening cDNA or genomic libraries or subclones for additional subclones containing segments of DNA that have been isolated and previously sequenced. The sequence presented is one of the nucleic acid probes incorporated in the microarray. Note: The sequence data for this patent can also be obtained in electronic format directly from USPTO at seqdata.uspto.gov/sequence.html

Sequence 25 BP; 4 A; 8 C; 11 G; 2 T; 0 U; 0 Other;

Query Match 1.0%; Score 16.6; DB 1; Length 25;

Best Local Similarity 82.6%; Pred. No. 3.2e+02;

Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 555 CCTAGCGCGCGCTTCGTCGTG 577

DB 24 CCCCAGCGCGCTTCGTCGTG 2

RESULT 162

ACH62897/c

ID ACH62897 standard; DNA; 25 BP.

XX AC ACH62897;

XX DT 17-OCT-2003 (first entry)

XX DE DNA target sequence #12033 useful in array for genetic analyses.

XX KW Gene expression analysis; array; hybridisation; genetic variation;
XX KW tag-labelled compound; gene family; in situ hybridisation;
XX KW library screening; Southern hybridisation; northern hybridisation;
XX KW dot-blot hybridisation; gene sequence; mutation detection;
XX KW target sequence; probe; PCR; primer; ss.

XX OS Unidentified.

XX PN US2003082596-A1.

XX PD 01-MAY-2003.

XX PF 08-AUG-2002; 2002US-00215112.

XX PR 08-AUG-2001; 2001US-0311040P.

XX

(MITT/) MITTMANN M.

Mittmann M;

WPI; 2003-576608/54.

New probe array useful e.g. for monitoring gene expression levels, for analysing genetic variations, or for hybridizing tag-labeled compounds, comprises multiple nucleic acid probes.

Claim 1; SEQ ID NO 12033; 9pp; English.

The present invention relates to nucleic acid sequences that are complementary to particular genes, and can be used as probes for a variety of analyses such as gene expression analysis. Each probe comprises 9 or more consecutive nucleotides from at least one of 14936 nucleotide sequences defined in the patent, or their perfect sense match, sense mismatch, antisense match or antisense mismatch oligonucleotides. The probes may be used in an array comprising at least 10 distinct nucleic acid probes. The array is useful in monitoring gene expression levels by hybridisation to a DNA library, in analysing genetic variations, and in hybridising tag-labelled compounds. The probes are useful for identifying family members of a gene. The probes are also useful in in situ hybridisations, in screening cDNA or genomic libraries (or derived subclones) for additional clones containing segments of DNA that have been previously isolated and sequenced, in Southern, Northern, or dot-blot hybridisation of genomic DNA to identify or detect the sequence of any gene or detect specific mutations in any gene, and in mapping the 5' termini of mRNA molecules by primer extensions. The nucleic acid sequences of the invention are also useful as PCR primers. The invention provides a large collection of nucleic acid sequences complementary to particular genes with a wide range of analytical uses. ACH50865-ACH65260 represent the target sequences of the invention. Note: The sequence data for this patent was obtained in electronic format directly from the USPTO web site at seqdata.uspto.gov/psipdEntry.html

Sequence 25 BP; 6 A; 5 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 1.0%; Score 16.6; DB 1; Length 25;

Best Local Similarity 82.6%; Pred. No. 3.2e+02;

Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1136 ACTACTCCACTCAGATGACATG 1158

DB 25 ACTACCACTTCAGTGTGACATG 3

RESULT 163

AAV60744/c

ID AAV60744 standard; DNA; 18 BP.

XX AC AAV60744;

XX DT 08-DEC-1998 (first entry)

XX DE Primer #2 for human CDK4 codons 1-163.

XX KW PCR primer; amplification; yeast; UAS; upstream activating sequence;
XX KW transcription terminator; cell cycle; Upstream Activation Sequence; UAS;
XX KW promoter; phosphorylation; cyclin; cyclin-dependent kinase; CDK; vector;
XX KW cyclin kinase inhibitor; CKI; growth; wound healing; cancer therapy; ss.

XX OS Synthetic.

XX OS Homo sapiens.

XX PN WO9816660-A1.

XX PD 23-APR-1998.

XX PF 16-OCT-1997; 97WO-US018508.

XX PR 16-OCT-1996; 96US-0029127P.

XX PR 27-NOV-1996; 96US-0031968P.

XX (BITE-) BITTECH INC.
 XX Bitter GA;
 XX WPI; 1998-251302/22.
 XX Screening for agents that effect cell cycle regulatory proteins - using a
 PT cell line that expresses a reporter gene in response to regulation
 PT through phosphorylation by a cyclin/CDK system.
 XX Example 4; Page 75; 93pp; English.
 XX Primers AAV60743-V60745 were used to PCR amplify codons 1-163 of the
 CC human cyclin-dependent kinase 4 (cdk4). The amplified product was used
 CC to generate a fusion protein comprising part of the cdk4 sequence linked
 CC to codons 154-302 of the yeast PHO85 gene. The fusion protein is used to
 CC screen for compounds that affect mammalian cell cycle regulatory
 CC proteins. The method comprises administering a compound to a cell line,
 CC which contains a reporter gene linked to an Upstream Activation Sequence
 CC (UAS) and a promoter, where the UAS binds a transcription control factor
 CC (TCF) which is regulated through cyclin/cyclin-dependent kinase (CDK)
 CC phosphorylation. Also included in the construct is an effector gene
 CC providing a gene product to permit normal cyclin/CDK regulation of the
 CC TCF. Expression of the reporter gene is then analysed in the cell line,
 CC thereby determining whether the compound affects the normal regulation.
 CC The method can be used to identify inhibitors and activators of mammalian
 CC cell cycle regulatory proteins, especially inhibitors and activators of
 CC cyclins, CDKs, cyclin/CDK complexes, cyclin kinase inhibitors (CKIs), and
 CC cyclin/CDK/CKI complexes. The identified agents can be used for
 CC stimulating growth of cells (as in wound healing), or regulating
 CC excessive cell growth and division (as in cancer therapy)
 XX Sequence 18 BP; 4 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
 SQ Query Match 0.9%; Score 16.4; DB 1; Length 18;
 Best Local Similarity 94.4%; Pred. No. 2.5e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 OY 1033 GACTTTGGCTGGCCGGA 1050
 DB 18 GACTTTGGCTGGCCGGA 1
 RESULT 164
 AAA82762
 ID AAA82762 standard; DNA; 19 BP.
 XX
 AC AAA82762;
 XX 04-DEC-2000 (first entry)
 DT cdk3 ribozyme binding site #47.
 XX
 DE Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
 XX Mammalia.
 XX WO200032765-A2.
 XX 08-JUN-2000.
 XX 06-DEC-1999; 99WO-US028772.
 XX 04-DEC-1998; 98US-0110954P.
 XX (IMMU-) IMMUSOL INC.
 XX Tritz R, Welch PJ, Barber JR, Robbins JM;
 XX WPI; 2000-412314/35.
 XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves

PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
 PT PCNA and Cyclin B1.
 XX
 PS Disclosure; Page 51; 109pp; English.
 XX
 CC The present invention relates to a hairpin or hammerhead ribozyme,
 CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
 CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
 CC Representative examples of ribozyme recognition sites are given in
 CC AA62415 to AAA86787. The ribozyme of the invention is useful for
 CC inhibiting restenosis by introduction of the ribozyme into cells. The
 CC ribozyme is resistant to endonuclease activity and hence is efficient in
 CC restenosis treatment
 XX Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
 SQ Query Match 0.9%; Score 16.4; DB 1; Length 19;
 Best Local Similarity 94.4%; Pred. No. 2.6e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 OY 1029 GGCTGACTTTGGCCTGGC 1046
 DB 1 GGCTGACTTCGGCCTGGC 18
 RESULT 165
 AAH57924
 ID AAH57924 standard; DNA; 19 BP.
 XX
 AC AAH57924;
 XX 10-SEP-2001 (first entry)
 DT Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:348.
 XX
 DE Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
 KW recognition site; target; ribozyme binding site; eye disease; vulnary;
 KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
 KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
 KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
 KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
 KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
 KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
 KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
 KW sickle cell retinopathy; ss.
 XX Homo sapiens.
 OS Synthetic.
 XX WO200130362-A2.
 XX 03-MAY-2001.
 XX 26-OCT-2000; 2000WO-US029500.
 XX 26-OCT-1999; 99US-0161532P.
 XX (IMMU-) IMMUSOL INC.
 XX Robbins JM, Tritz R;
 XX WPI; 2001-300427/31.
 XX Treating proliferative skin or eye diseases and scarring, using ribozymes
 PT that cleave RNA encoding cytokines involved in inflammation, matrix
 PT metalloproteinases, growth factors and cell-cycle dependent kinases.
 XX Example 1; Page 97; 408pp; English.
 PS The present invention describes a method for treating a proliferative
 CC skin or eye disease and scarring. The method involves administering a
 CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
 CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle

CC dependent kinase, growth factor or a reductase, or administering a
 CC nucleic acid molecule (II) comprising a promoter operably linked to a
 CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
 CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
 CC ophthalmological, vulnary, keratolytic and virucide activities, and
 CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
 CC in gene therapy. (I) and (II) are useful for treating proliferative skin
 CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
 CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
 CC also be used for treating proliferative eye diseases such as diabetic
 CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
 CC prematurity and retinal detachment, and for treating and preventing
 CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
 CC scar. AAH57577 to AAH62099 represent sequences used in the
 CC exemplification of the present invention

XX Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
 Query Match 0.9%; Score 16.4; DB 1; Length 19;
 Best Local Similarity 94.4%; Pred. No. 2.6e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1029 GGCTGACTTGGCTGGC 1046
 DB 1 GGCTGACTTGGCTGGC 18

RESULT 166
 AAZ18127
 ID AAZ18127 standard; DNA; 20 BP.

XX AC AAZ18127;
 XX DT 11-OCT-1999 (first entry)

XX STK 3 gene specific primer.
 DE Genetic proximity; gene expression; cell characterisation; homeobox gene;
 KW genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
 KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
 KW primer; ss.

XX Synthetic.
 OS Homo sapiens.
 XX WO9934016-A2.
 XX PD 08-JUL-1999.

XX PF 28-DEC-1998; 98WO-IL000625.

XX PR 29-DEC-1997; 97IL-00122793.

XX PR 16-OCT-1998; 98IL-00126627.

XX (GENE-) GENENA LTD.

XX PA 16-OCT-1998; 98IL-00126627.

XX PI 16-OCT-1998; 98IL-00126627.

XX WPI; 1999-419113/35.

XX P-PSDB; AA14662.

XX PT Identifying and characterizing cells by comparing the pattern of gene
 expression in a selected gene family.

XX Claim 4; Page 44; 102pp; English.

XX The invention provides a new method for identifying and characterising
 cells. The method for determining the genetic proximity of a first cell
 and a second cell comprises: (a) obtaining the first cell and the second
 cell; (b) determining in the first cell and the second cell the pattern
 of expression of genes in a selected gene family; and (c) calculating a
 proximity index using a specified formula. The methods can be used for
 characterising cells, e.g. for determining the origin of a cell, its

XX genetic status, whether it carries a genetic defect, or whether it is
 transformed. They can be used for detecting a selected genetic defect in
 an individual, e.g. a fetus. They can also be used for determining the

XX genetic status, whether it carries a genetic defect, or whether it is
 transformed. They can be used for detecting a selected genetic defect in
 an individual, e.g. a fetus. They can also be used for determining the

XX genetic status, whether it carries a genetic defect, or whether it is
 transformed. They can be used for detecting a selected genetic defect in
 an individual, e.g. a fetus. They can also be used for determining the

XX genetic status, whether it carries a genetic defect, or whether it is
 transformed. They can be used for detecting a selected genetic defect in
 an individual, e.g. a fetus. They can also be used for determining the

XX genetic status, whether it carries a genetic defect, or whether it is
 transformed. They can be used for detecting a selected genetic defect in
 an individual, e.g. a fetus. They can also be used for determining the

XX genetic status, whether it carries a genetic defect, or whether it is
 transformed. They can be used for detecting a selected genetic defect in
 an individual, e.g. a fetus. They can also be used for determining the

XX genetic status, whether it carries a genetic defect, or whether it is
 transformed. They can be used for detecting a selected genetic defect in
 an individual, e.g. a fetus. They can also be used for determining the

XX genetic status, whether it carries a genetic defect, or whether it is
 transformed. They can be used for detecting a selected genetic defect in
 an individual, e.g. a fetus. They can also be used for determining the

CC genetic status, whether it carries a genetic defect, or whether it is
 CC transformed. They can be used for detecting a selected genetic defect in
 CC an individual, e.g. a fetus. They can also be used for determining the
 CC effect of a selected treatment on a test cell. They can also be used for
 CC obtaining cells capable of expressing an homeobox related desired
 CC property. The method uses reverse transcriptase polymerase chain reaction
 CC (RT-PCR) for determining the pattern of gene expression in a selected
 CC gene family. Sequences AAZ17803-218342 represent primers that can be used
 CC in the RT-PCR reactions to determine the pattern of gene expression. The
 CC gene family can be selected from a set of homeobox genes, kinase genes,
 CC protein phosphatase genes, P450 enzyme genes, steroid receptor
 CC superfamily genes or cadherin superfamily genes

XX Sequence 20 BP; 8 A; 9 C; 2 G; 1 T; 0 U; 0 Other;
 Query Match 0.9%; Score 16.4; DB 1; Length 20;
 Best Local Similarity 94.4%; Pred. No. 2.8e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 972 ACACCGAGACTCAAGCC 989
 DB 3 ACACCGAGACTCAACC 20

RESULT 167
 AAZ18155
 ID AAZ18155 standard; DNA; 20 BP.

XX AC AAZ18155;
 XX DT 11-OCT-1999 (first entry)

XX STK 17 gene specific primer.

XX Genetic proximity; gene expression; cell characterisation; homeobox gene;
 KW genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
 KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
 KW primer; ss.

XX Synthetic.
 OS Homo sapiens.
 XX WO9934016-A2.
 XX PD 08-JUL-1999.

XX PF 28-DEC-1998; 98WO-IL000625.

XX PR 29-DEC-1997; 97IL-00122793.

XX PR 16-OCT-1998; 98IL-00126627.

XX (GENE-) GENENA LTD.

XX PA 16-OCT-1998; 98IL-00126627.

XX PI 16-OCT-1998; 98IL-00126627.

XX WPI; 1999-419113/35.

XX P-PSDB; AA14690.

XX PT Identifying and characterizing cells by comparing the pattern of gene
 expression in a selected gene family.

XX Claim 4; Page 45; 102pp; English.

XX The invention provides a new method for identifying and characterising
 cells. The method for determining the genetic proximity of a first cell
 and a second cell comprises: (a) obtaining the first cell and the second
 cell; (b) determining in the first cell and the second cell the pattern
 of expression of genes in a selected gene family; and (c) calculating a
 proximity index using a specified formula. The methods can be used for
 characterising cells, e.g. for determining the origin of a cell, its
 genetic status, whether it carries a genetic defect, or whether it is
 transformed. They can be used for detecting a selected genetic defect in
 an individual, e.g. a fetus. They can also be used for determining the

XX genetic status, whether it carries a genetic defect, or whether it is
 transformed. They can be used for detecting a selected genetic defect in
 an individual, e.g. a fetus. They can also be used for determining the

XX genetic status, whether it carries a genetic defect, or whether it is
 transformed. They can be used for detecting a selected genetic defect in
 an individual, e.g. a fetus. They can also be used for determining the

XX genetic status, whether it carries a genetic defect, or whether it is
 transformed. They can be used for detecting a selected genetic defect in
 an individual, e.g. a fetus. They can also be used for determining the

XX genetic status, whether it carries a genetic defect, or whether it is
 transformed. They can be used for detecting a selected genetic defect in
 an individual, e.g. a fetus. They can also be used for determining the

XX genetic status, whether it carries a genetic defect, or whether it is
 transformed. They can be used for detecting a selected genetic defect in
 an individual, e.g. a fetus. They can also be used for determining the

XX genetic status, whether it carries a genetic defect, or whether it is
 transformed. They can be used for detecting a selected genetic defect in
 an individual, e.g. a fetus. They can also be used for determining the

XX genetic status, whether it carries a genetic defect, or whether it is
 transformed. They can be used for detecting a selected genetic defect in
 an individual, e.g. a fetus. They can also be used for determining the

XX genetic status, whether it carries a genetic defect, or whether it is
 transformed. They can be used for detecting a selected genetic defect in
 an individual, e.g. a fetus. They can also be used for determining the

XX genetic status, whether it carries a genetic defect, or whether it is
 transformed. They can be used for detecting a selected genetic defect in
 an individual, e.g. a fetus. They can also be used for determining the

XX genetic status, whether it carries a genetic defect, or whether it is
 transformed. They can be used for detecting a selected genetic defect in
 an individual, e.g. a fetus. They can also be used for determining the

XX genetic status, whether it carries a genetic defect, or whether it is
 transformed. They can be used for detecting a selected genetic defect in
 an individual, e.g. a fetus. They can also be used for determining the

CC effect of a selected treatment on a test cell. They can also be used for
CC obtaining cells capable of expressing an homeobox related desired
CC property. The method uses reverse transcriptase polymerase chain reaction
CC (RT-PCR) for determining the pattern of gene expression in a selected
CC gene family. Sequences AAZ17803-Z18342 represent primers that can be used
CC in the RT-PCR reactions to determine the pattern of gene expression. The
CC gene family can be selected from a set of homeobox genes, kinase genes,
CC protein phosphatase genes, P450 enzyme genes, steroid receptor
CC superfamily genes or cadherin superfamily genes
XX
SQ Sequence 20 BP; 8 A; 9 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 0.9%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 2.8e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 972 ACACCGAGACCTCAAGCC 989
Db 3 ACACCGAGACCTCAAAACC 20

RESULT 168

AAZ18141
ID AAZ18141 standard; DNA; 20 BP.

XX AAZ18141;

XX 11-OCT-1999 (first entry)

XX STK 10 gene specific primer.

XX Genetic proximity; gene expression; cell characterisation; homeobox gene;
KW Genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
KW primer; ss.

XX Synthetic.

OS Homo sapiens.

XX WO9934016-A2.

XX 08-JUL-1999.

XX 28-DEC-1998; 98WO-IL000625.

XX 29-DEC-1997; 97IL-00122793.

XX 16-OCT-1998; 98IL-00126627.

XX (GENE-) GENENA LTD.

XX Vider B;

XX WPI; 1999-419113/35.

XX P-PSDB; AAY14676.

XX Identifying and characterizing cells by comparing the pattern of gene
XX expression in a selected gene family.

XX Claim 4; Page 44; 102pp; English.

XX The invention provides a new method for identifying and characterizing
CC cells. The method for determining the genetic proximity of a first cell
CC and a second cell comprises: (a) obtaining the first cell and the second
CC cell; (b) determining in the first cell and the second cell the pattern
CC of expression of genes in a selected gene family; and (c) calculating a
CC proximity index using a specified formula. The methods can be used for
CC characterizing cells, e.g. for determining the origin of a cell, its
CC genetic status, whether it carries a genetic defect, or whether it is
CC transformed. They can be used for detecting a selected genetic defect in
CC an individual, e.g. a fetus. They can also be used for determining the
CC effect of a selected treatment on a test cell. They can also be used for
CC obtaining cells capable of expressing an homeobox related desired
CC property. The method uses reverse transcriptase polymerase chain reaction

CC (RT-PCR) for determining the pattern of gene expression in a selected
CC gene family. Sequences AAZ17803-Z18342 represent primers that can be used
CC in the RT-PCR reactions to determine the pattern of gene expression. The
CC gene family can be selected from a set of homeobox genes, kinase genes,
CC protein phosphatase genes, P450 enzyme genes, steroid receptor
CC superfamily genes or cadherin superfamily genes
XX
SQ Sequence 20 BP; 8 A; 9 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 0.9%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 2.8e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 972 ACACCGAGACCTCAAGCC 989
Db 3 ACACCGAGACCTCAAAACC 20

RESULT 169

ABZ93276/c

ID ABZ93276 standard; DNA; 20 BP.

XX ABZ93276;

XX 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; ds.

OS Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
XX respiration, has oligo(s) antisense to specific gene(s) or its
XX corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
XX ubiquinone.

XX Disclosure; SEQ ID NO 8518; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, anticholinergic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine

CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 20 BP; 6 A; 8 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.9%; Score 16.4; DB 1; Length 20;

Best Local Similarity 94.4%; Pred. No. 2.8e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1087 GTGGTGACACTGTGTAC 1104

DB 20 GTGGTGACACTGTGTGC 3

RESULT 170

AAD30434

ID AAD30434 standard; DNA; 24 BP.

XX AAD30434;

XX AAD30434;

DT 21-MAY-2002 (first entry)

DE Human androgen receptor (AR) gene exon 1 amplifying primer #3.

KW Human; AIB1; amplified in breast cancer 1; androgen receptor; AR;

KW prostate cancer; exon 1; PCR primer; ss.

OS Homo sapiens.

PN WO200210452-A2.

PD 07-FEB-2002.

PF 27-JUL-2001; 2001WO-US023834.

PR 27-JUL-2000; 2000US-0221074P.

PA (UYRP) UNIV ROCHESTER.

PI Chang C;

PS WPI; 2002-206195/26.

XX Assessing the risk of acquiring or developing prostate cancer in a human
XX subject, comprises determining the length of the contiguous CAG, CAA
XX and/or GGN repeats in the AIB1 gene and/or androgen receptor gene of the
XX subject.

PS Claim 39; Page 42; 86pp; English.

XX The invention relates to a method for assessing the risk of prostate
XX cancer in a human subject. The method involves determining the length of
XX the contiguous CAG or CAA repeats in both AIB1 (Amplified In Breast
XX cancer 1) gene alleles or contiguous CAG, CAA or GGN repeats in the
XX androgen receptor gene of the subject. The method is useful for assessing
XX a subject's risk for acquiring or developing prostate cancer. The present
XX sequence is a PCR primer used to amplify human androgen receptor (AR)
XX gene exon 1 and is used in the molecular analysis and assessment of the
XX GGN repeat of AR gene

XX Sequence 24 BP; 3 A; 13 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.9%; Score 16.4; DB 1; Length 24;

Best Local Similarity 94.4%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 554 CCTCAGCGCGCCCTCC 571

DB 2 CCTCAGCGCGCGCTCC 19

RESULT 171

ACI40315/C

ID ACI40315 standard; DNA; 25 BP.

XX ACI40315;

DT 13-OCT-2003 (first entry)

DE Human microarray DNA oligonucleotide SEQ ID NO 40306.

KW EST; ss; probe; expressed sequence tag; microarray; gene expression;
KW genetic variation; biallelic marker; polymorphism; human;
KW cross-species comparison.

OS Homo sapiens.

PN US2003104410-A1.

PD 05-JUN-2003.

PF 15-MAR-2002; 2002US-00098263.

PR 16-MAR-2001; 2001US-0276759P.

PA (AFFY-) AFFYMETRIX INC.

PI Mittmann MP;

PS WPI; 2003-567953/53.

XX New array of nucleic acid probes, useful for in situ hybridization, in
XX Southern, Northern or dot-blot hybridization to identify or detect the
XX sequence or specific mutations of any gene.

PS Claim 1; SEQ ID NO 40306; 9pp; English.

XX The invention discloses a microarray comprising a plurality of nucleic
XX acid probes including one of 2,018,500 fully defined sequences, or its
XX perfect match, antisense match or antisense mismatch.
XX Also disclosed is a method of gene expression analysis. The array is used
XX in monitoring gene expression levels by hybridisation to a DNA library,
XX in analysis of genetic variation or in hybridisation of tag-labelled
XX compounds. The nucleic acid probes are specifically designed for analysis
XX of at least one target sequence. The method of analysis comprises
XX hybridising at least one or more nucleic acids to at least two or more
XX nucleic acid probes and detecting the hybridisation. The nucleic acid
XX probes are attached to a solid support. The analysis comprises monitoring
XX gene expression levels, identifying biallelic markers or polymorphisms,
XX or family members of a gene and a cross-species comparison. Each of the
XX nucleic acids further comprises a tag sequence. The array of nucleic acid
XX probes is useful in situ hybridisation, in Southern, Northern or dot-
XX blot hybridisation to identify or detect the sequence or specific
XX mutations of any gene, in mapping the 5' termini of mRNA molecules by
XX primer extensions or in screening cDNA or genomic libraries or subclones
XX for additional subclones containing segments of DNA that have been
XX isolated and previously sequenced. The sequence presented is one of the
XX nucleic acid probes incorporated in the microarray. Note: The sequence
XX data for this patent can also be obtained in electronic format directly
XX from USPTO at seqdata.uspto.gov/sequence.html

XX Sequence 25 BP; 2 A; 8 C; 7 G; 8 T; 0 U; 0 Other;

Query Match 0.9%; Score 16.4; DB 1;
Best Local Similarity 94.4%; Pred. No. 3.5e+02;

Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 977 GAGACCTCAAGCCCCAGA 994

DB 18 GAGACCTCTAGCCCCAGA 1

```

RESULT 172
AAS11083
ID AAS11083 standard; DNA; 21 BP.
XX
XX
AC AAS11083;
XX
DT 24-OCT-2001 (first entry)
XX
DE Bacterial 16S RNA antisense oligomer #49.
XX
XX Antisense; bacterial 16S ribosomal RNA; rRNA; bacterial infection; human;
KW food grain supplement; livestock; poultry; therapeutic; ss.
XX
XX Streptococcus pneumoniae.
OS
PN WO200142457-A2.
XX
XX 14-JUN-2001.
XX
XX 29-NOV-2000; 2000WO-US042391.
FF
XX
PR 29-NOV-1999; 99US-0168150P.
XX
XX (AVIB-) AVI BIOPHARMA INC.
PA
XX Iversen PL;
PI
XX WPI; 2001-457295/49.
DR
XX
XX Antibacterial compound, useful for treating bacterial infections and as
PT livestock and poultry food supplement, comprises antisense
PT oligonucleotides complementary to bacterial 16S and 23S rRNA.
XX
XX Disclosure; Page 28; 62pp; English.
XX
XX AAS11035-AAS11157 represent the coding sequences of bacterial 16S
CC ribosomal RNA (rRNA) antisense oligomers. These sequences are
CC antibacterial compounds comprising substantially uncharged antisense
CC oligomers containing 8-40 nucleotide subunits, including a targeting
CC nucleic acid sequence at least 10 nucleotides in length which is
CC complementary to a bacterial 16S or 23S rRNA nucleic acid sequence. The
CC antisense oligomers are used for treating a bacterial infection in a
CC human or a mammalian animal produced by Escherichia coli, Salmonella
CC typhimurium, Pseudomonas aeruginosa, Vibrio cholera, Neisseria
CC gonorrhoea, Helicobacter pylori, Bartonella henselae, Haemophilus
CC influenza, Shigella dysenteriae, Staphylococcus aureus, Mycobacterium
CC tuberculosis, Streptococcus pneumoniae, Treponema pallidum and Chlamydia
CC trachomatis. The antibacterial compound may be used as a food grain
XX supplement in livestock and poultry food composition
XX
SQ Sequence 21 BP; 6 A; 7 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 3.2e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1439 ATGCCATGAACATCCATTCT 1459
Db 1 ATGTCATGAACATCCACTCT 21

RESULT 173
ABK99296/C
ID ABK99296 standard; RNA; 21 BP.
XX
XX
AC ABK99296;
XX
DT 21-OCT-2002 (first entry)
XX
DE Hepatitis C virus (HCV) NS5B replicase RNA synthesis template #26.
XX
XX Hepatitis C virus; HCV; NS5B replicase; ss; RNA polymerase.
XX
XX
OS
PN JP2001321190-A.

OS Synthetic.
XX
XX US2002064771-A1.
XX
XX 30-MAY-2002.
XX
XX 06-APR-2001; 2001US-00828034.
FF
XX
PR 07-APR-2000; 2000US-0195852P.
XX
XX (ZHON/) ZHONG W.
PA (HONG/) HONG Z.
PA (FERR/) FERRARI E.
XX
XX Zhong W, Hong Z, Ferrari E;
PI
XX WPI; 2002-582330/62.
DR
XX
XX Novel replicase complex comprising hepatitis C virus NS5B replicase, a 3
PT nucleotide-long template to which a 2 nucleotide-long primer is annealed,
PT and template and primer which do not form a stable duplex in the absence
PT of HCV NS5B.
XX
XX Example; Page 6; 17pp; English.
XX
XX The invention relates to a replicase complex comprising a hepatitis C
CC virus (HCV) NS5B replicase protein, a linear nucleic acid template and a
CC complementary nucleic acid primer which is annealed to the 3' terminus of
CC the template, where the template is at least three nucleotides and the
CC primer is two or three nucleotides, and the template and primer do not
CC form a stable duplex in solution in the absence of the HCV NS5B protein.
CC The complex is useful for detecting HCV replicase activity and permits
CC establishment of sensitive RNA-dependent RNA polymerase assays to screen
CC and evaluate antiviral inhibitors and to improve the specificity and
CC efficacy of the inhibitors. The complex is also useful in the development
CC of a reliable system for determining kinetic and thermodynamic constants
CC of HCV NS5B-catalysed nucleotide incorporation and investigation of
CC mechanistic inhibitors for mis-incorporation or chain termination.
CC Specifically, the short RNA template and primer pairs are useful in
CC screening assays which are used for determining kinetic, thermodynamic
CC and mechanistic properties of NS5B replication and ultimately in the
CC development of inhibitors of NS5B. Newly identified inhibitors of
CC replicase activity may be used for developing anti-HCV pharmaceuticals.
CC Sequences ABK99271-ABK99296 represent HCV NS5B replicase RNA synthesis
CC templates
XX
SQ Sequence 21 BP; 7 A; 14 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 3.2e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 230 GTGGTGGTGGTGGCGGCACTG 250
Db 21 GTGGTGGTGGTGGTGGTGGTGG 1

RESULT 174
ABL44421
ID ABL44421 standard; DNA; 21 BP.
XX
XX ABL44421;
XX
XX 11-APR-2002 (first entry)
DT
XX
XX Human chromosome 1p36-35 PCR primer SEQ ID NO:1465.
XX
XX Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
KW PCR primer; ss.
XX
XX Homo sapiens.
OS
XX JP2001321190-A.
PN

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XX PD 20-NOV-2001.
XX XX
XX PF 12-MAR-2001; 2001JP-00068285.
XX XX
XX PR 10-MAR-2000; 2000JP-00066716.
XX XX
XX PA (RIKA ) RIKAGAKU KENKYUSHO.
XX PA (GENO-) GENOTEX YG.
XX XX
XX DR WPI; 2002-144136/19.
XX XX
XX PT Arraying genome clones.
XX XX
XX PS Claim 4; Page 33; 529pp; Japanese.
XX XX

The present invention describes a method of arraying genome clones. The
method comprises: (a) clones of the genomic libraries contained in
multiwell plates numbered for discrimination are mixed in each of the
multiwell plates; (b) a primer designed based on the chromosome marker
sequence is added to the mixture to carry out an amplification reaction;
(c) a signal corresponding to the marker is detected from the resultant
amplified product to specify the discrimination Nos. of the multiwell
plates containing the clones having said marker sequence; (d) the order
of the markers is changed so that the same discrimination Nos. succeed to
the maximum in the specified discrimination Nos. to array the multiwell
plates; (e) the clones in the multiwell plates of the specified
discrimination Nos. are mixed respectively in each wells of longitudinal
and lateral directions; (f) the mixed clones are cultured and the
resultant cultures are amplified by using the above primer; (g) signals
are detected from the amplified products; (h) the clones in the multiwell
plates are specified from the detected result; and (i) the clones are
reconstituted as the positions on the chromosome and arrayed. The
microarray is useful for gene analysis. ABL42957 to ABL45322 represent
PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
represent PCR primers for human chromosome 21q22.1, which are
specifically claimed for use in the present invention
XX
SQ Sequence 21 BP; 5 A; 7 C; 3 G; 6 T; 0 U; 0 Other;
Query Match 0.9%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 3.2e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1140 CTCCTCTCAGATGACATGTG 1160
DB 1 CTCCTCTCAGATGACATCTG 21

RESULT 175
ABT34114/c
XX AC ABL34114;
XX AC
XX DT 29-MAY-2003 (first entry)
XX XX
XX DE Human pigmentation trait-related PCR primer - SEQ ID No 213.
XX XX
XX KW Human; single nucleotide polymorphism; SNP; ss; melanocortin-1 receptor;
XX KW genetic pigmentation trait; MC1R; agouti signaling protein; ASIP; race;
XX KW hair colour; eye colour; forensic tool; PCR; primer.
XX XX
XX OS Homo sapiens.
XX XX
XX PN WO200297047-A2.
XX XX
XX PD 05-DEC-2002.
XX XX
XX PF 28-MAY-2002; 2002WO-US016789.
XX XX
XX PR 25-MAY-2001; 2001US-0293560P.
XX PR 21-JUN-2001; 2001US-0300187P.
XX XX

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PR 07-AUG-2001; 2001US-0310781P.
PR 17-SEP-2001; 2001US-0323662P.
PR 26-OCT-2001; 2001US-0344418P.
PR 15-NOV-2001; 2001US-0334674P.
PR 02-JAN-2002; 2002US-0346303P.
XX XX
XX PA (DNAP-) DNAPRINT GENOMICS INC.
XX XX
XX PI Fridakis T;
XX XX
XX DR WPI; 2003-239091/23.
XX XX
XX PT Inferring genetic pigmentation trait such as hair/eye color or shade from
XX PT nucleic acid sample of human subject, by identifying a pigmentation-
XX PT related haplotype allele of a pigmentation gene in the sample.
XX XX

Example 17; Page 248; 396pp; English.
XX PS
XX XX
XX CC The invention comprises a method for inferring a genetic pigmentation
XX CC trait of a human. The method involves identifying a single nucleotide
XX CC polymorphism (SNP) in a pigmentation gene - where the pigmentation gene
XX CC is not melanocortin-1 receptor (MC1R) and agouti signaling protein
XX CC (ASIP). The method of the invention is useful for inferring a genetic
XX CC pigmentation trait of a human, especially for inferring the race of a
XX CC human subject. The method is useful for inferring a genetic pigmentation
XX CC trait such as hair shade or colour, or eye shade or colour of a human
XX CC subject. The method may be used as a forensic tool for obtaining
XX CC information relating to physical characteristics of a potential crime
XX CC victim or a perpetrator of a crime from a nucleic acid sample present at
XX CC a crime scene. The present PCR primer is used in the exemplification of
XX CC the invention
XX XX
XX SQ Sequence 21 BP; 5 A; 8 C; 2 G; 6 T; 0 U; 0 Other;
Query Match 0.9%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 3.2e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 863 TGAAGCAGTACCTGGATGATG 883
DB 21 TGAAGCAGTACATGGTGATG 1

RESULT 176
ADD14567
XX ID ADD14567 standard; DNA; 21 BP.
XX XX
XX AC ADD14567;
XX XX
XX DT 01-JAN-2004 (first entry)
XX XX
XX DE Human src biomarker reverse PCR primer SEQ ID NO:756.
XX XX
XX KW predictor set; protein tyrosine kinase activity modulator;
XX KW protein tyrosine kinase pathway; protein tyrosine kinase; cytostatic;
XX KW gene therapy; drug sensitivity; genetic profile; cancer; human;
XX KW PCR primer; ss.
XX XX
XX OS Synthetic.
XX OS Homo sapiens.
XX XX
XX PN WO2003062395-A2.
XX XX
XX PD 31-JUL-2003.
XX XX
XX PF 17-JAN-2003; 2003WO-US001981.
XX XX
XX PR 18-JAN-2002; 2002US-0350061P.
XX XX
XX PA (BRIM ) BRISTOL-MYERS SQUIBB CO.
XX XX
XX PR Huang F, Fairchild CR, Lee FY, Shaw P;
XX XX

```

DR WPI; 2003-636735/60.
XX
XX New polynucleotides and polypeptides for predicting the activity of
PT compounds that interact with protein tyrosine kinases and/or protein
PT tyrosine kinase pathways.
PS Example 2; SEQ ID NO 756; 139pp; English.
XX
CC The present invention describes a predictor set comprising a plurality of
CC polynucleotides or polypeptides whose expression pattern is predictive of
CC the response of cells to treatment with a compound that modulates protein
CC tyrosine kinase activity or members of the protein tyrosine kinase
CC pathway. Also described: (1) predicting whether a compound is capable of
CC modulating the activity of cells, comprising obtaining a sample of cells,
CC determining whether the cells express a plurality of markers, and
CC correlating the expression of the markers to the compound's ability to
CC modulate the activity of the cells; (2) a plurality of cell lines for
CC identifying polynucleotides and polypeptides whose expression levels
CC correlate with compound sensitivity or resistance of cells associated
CC with a disease state; and (3) identifying polynucleotides and
CC polypeptides that predict compound sensitivity or resistance of cells
CC associated with a disease state, comprising subjecting the plurality of
CC cell lines to one or more compounds, analysing the expression pattern of
CC a microarray of polynucleotides or polypeptides, and selecting
CC polynucleotides or polypeptides that predict the sensitivity or
CC resistance of cells associated with a disease state by using the
CC expression pattern of the microarray. The polynucleotides and
CC polypeptides have cytostatic activities, and can be used in gene therapy.
CC The polynucleotides and polypeptides are useful in predicting the
CC activity of compounds that interact with protein tyrosine kinases and/or
CC protein tyrosine kinase pathways. These may be used in determining drug
CC sensitivity in patients to allow the development of individualized
CC genetic profiles which aid in treating diseases and disorders (e.g.
CC cancer) based on patient response at a molecular level. The present
CC sequence is used in the exemplification of the present invention.
XX
SQ Sequence 21 BP; 6 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 0.9%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 3.2e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 986 AGGCCGAGACCTGCTCATCA 1006
||| ||||| ||||| |||||
Db 1 AGTCGAGAACCTGCTCATTA 21
RESULT 177
AAI66678/c
ID AAI66678 standard; DNA; 22 BP.
XX
XX AC AAI66678;
XX
XX 07-JAN-2002 (first entry)
XX
XX Human CERP DNA related PCR primer.
XX
XX CERP; arteriosclerosis; cholesterol ester transfer protein; HDL;
KW high density lipoprotein; human; PCR primer; ss.
XX
XX Homo sapiens.
XX
XX WO200171032-A1.
XX
XX 27-SEP-2001.
XX
XX 23-MAR-2001; 2001WO-JP002327.
XX
XX 24-MAR-2000; 2000JP-00084264.
XX
XX (BMLB-) EML INC.
XX
XX Nagano M, Ito M, Sagehashi Y, Hattori H, Egashira T, Yamashita S;

PI Matsuzawa Y;
XX
XX WPI; 2001-611516/70.
XX
XX Determining a risk factor for arteriosclerosis comprises detecting
PT mutations in genes for cholesterol ester transfer protein.
XX
XX Disclosure; Page 20; 58pp; Japanese.
XX
CC The invention relates to detecting the risk factor for arteriosclerosis
CC in a subject that involves detecting mutations in the gene for
CC cholesterol ester transfer protein (CETP) related to the degree of risk
CC of arteriosclerosis. The mutant proteins alter the level of HDL in the
CC blood. The high frequency mutations can be detected for prevention and
CC treatment of arteriosclerosis. Sequences AAI6655-91 represent PCR
CC primers related to the human CETP DNA, used during the course of the
CC invention
XX
SQ Sequence 22 BP; 5 A; 12 C; 2 G; 3 T; 0 U; 0 Other;
Query Match 0.9%; Score 16.2; DB 1; Length 22;
Best Local Similarity 85.7%; Pred. No. 3.3e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 232 GGTGGTGGTGGCGGAGTGAC 252
||| ||||| ||||| |||||
Db 22 GGTGGTGGTGGCGGAGTGAC 2
RESULT 178
ABZ99041/c
ID ABZ99041 standard; DNA; 22 BP.
XX
XX AC ABZ99041;
XX
XX 17-OCT-2003 (first entry)
XX
XX Human PDE4A-MTA oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antisthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
XX
XX WO200285308-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 24-APR-2001; 2001US-0286137P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Disclosure; SEQ ID NO 14283; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,

CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: the sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 22 BP; 3 A; 5 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 0.9%; Score 16.2; DB 1; Length 22;
Best Local Similarity 85.7%; Pred. No. 3.3e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 535 AGCCCCATCTTGACAAAGCCC 555
DB 22 AGCCCCATCTGTGACAGCAC 2

RESULT 179
AAA64536/c
ID AAA64536 standard; DNA; 23 BP.

AC AAA64536;

XX 02-JAN-2001 (first entry)

DE PCR primer G6 used to amplify exon 2 of human FEZ1 gene.

XX Human; FEZ1 gene; tumour suppressor gene; 8p22; cancer; tumour growth;
KW tumour proliferation; tubulin; microtubule; protein Efi-gamma;
KW tubulin polymerisation disorder; mitosis initiation; cell proliferation;
KW cell growth; cell shape; cell rigidity; cell motility; DNA replication;
KW tumorigenesis; tumour survival; metastasis; PCR primer; ss.

XX Homo sapiens.

XX WO2000050565-A2.

XX 31-AUG-2000.

XX 25-FEB-2000; 2000WO-US004950.

XX 25-FEB-1999; 99US-0121537P.

XX (UYJE-) UNIV JEFFERSON THOMAS.

XX Croce CM, Ishii H;

XX WPI; 2000-558396/51.

XX New polynucleotide homologous with a portion of one strand of the human
PT FEZ1 gene, useful for alleviating abnormal cell proliferation such as
PT cancer.

XX Example 1; Page 45; 255pp; English.

XX PCR primers AAA64535-36 were used to amplify a fragment of the human FEZ1
CC gene. FEZ1 is a tumour suppressor gene, located at chromosome location
CC 8p22. Decreased or no expression of FEZ1 is detected in a variety of
CC cancer cells. Expression of FEZ1 inhibits tumour growth and
CC proliferation. FEZ1 also interacts with tubulin, with microtubules, and
CC with protein Efi-gamma. Post-translational phosphorylation and

CC dephosphorylation modulates the effect of the FEZ1 protein. Inhibitors of
CC FEZ1 gene expression are useful for inducing cells to proliferate.
CC Compounds which modulate FEZ1 association with tubulin are useful for
CC alleviating tubulin hyper- or hypo- polymerisation disorders, such as
CC those associated with aberrant initiation of mitosis, modulation of the
CC initiation and rate of cell proliferation and cell growth, modulation of
CC cell shape, cell rigidity, cell motility, rate and stage of cellular DNA
CC replication, intracellular distribution of organelles, metastatic
CC potential of cell and cellular transformation from a non-cancerous to
CC cancerous phenotype. Compounds which modulate FEZ1 binding and
CC phosphorylation are also useful for alleviating a disorder, such as
CC tumorigenesis, tumour survival, growth and metastasis
XX

SQ Sequence 23 BP; 3 A; 8 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.9%; Score 16.2; DB 1; Length 23;

Best Local Similarity 85.7%; Pred. No. 3.5e+02;

Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 850 CTGGAGAGGACCTGAGACAG 870

DB 23 CTGGAGAGGACCTGACAG 3

RESULT 180

ABA82542

ID ABA82542 standard; DNA; 24 BP.

XX ABA82542;

XX 25-JAN-2002 (first entry)

DE Zmax1 gene region physical map preparation STS marker #501.

XX Human; high bone mass; HBM gene; Zmax1 gene; chromosome 11; 11q13.3;
KW sequence tagged site; STS; osteoporosis; osteopathic; gene therapy;
KW antisense therapy; vaccine; bone disorder; Paget's disease; adapter;
KW sclerostosis; osteomalacia; fibrous dysplasia; PCR primer; linker; ss.

XX Homo sapiens.

XX Synthetic.

XX WO200177327-A1.

XX 18-OCT-2001.

XX 21-JUN-2000; 2000WO-US016951.

XX 05-APR-2000; 2000US-00543771.

XX 05-APR-2000; 2000US-00544398.

XX (GENO-) GENOME THERAPEUTICS CORP.

XX Carulli JP, Little RD, Recker RR, Johnson ML;

XX WPI; 2001-657171/75.

XX New high bone mass (HBM) and Zmax1 genes and proteins useful for
PT modulating bone mass for the treatment of e.g. osteoporosis.

XX Disclosure; Page 37; 443pp; English.

XX The present invention describes the human Zmax1 gene and the high bone
CC mass (HBM) gene, which are found on chromosome 11q13.3. The Zmax1 and HBM
CC genes have osteopathic activities. The genes can be used in gene therapy,
CC antisense therapy and in the production of vaccines. They can be used in
CC the diagnosis and treatment of bone disorders including osteoporosis,
CC Paget's disease, sclerostosis, osteomalacia and fibrous dysplasia.
CC ABA82038 to ABA82700 and AAG68168 to AAG68193 represent sequences used in
CC the exemplification of the present invention

XX Sequence 24 BP; 6 A; 8 C; 4 G; 6 T; 0 U; 0 Other;

```
Query Match      0.9%; Score 16.2; DB 1; Length 24;
Best Local Similarity 85.7%; Pred. No. 3.7e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 862 CTGAAGCAGTACTCGTGTGAC 882
Db 1 CTGAACCACTACTCTGTATGAC 21

RESULT 181
ABS55758/c
ID ABS55758 standard; DNA; 24 BP.
AC ABS55758;
XX
XX 22-JAN-2003 (first entry)
XX
XX Human p70 ribosome S6 kinase 26.29 RT-PCR primer #1.
XX
XX Human p70 ribosome S6 kinase 26.29; human; malignant tumour;
XX inflammation; immunological disease; haemopathy;
XX HIV human immunodeficiency virus; reverse transcriptase PCR; RT-PCR;
XX primer; ss.
XX
XX Homo sapiens.
XX
XX CN1347994-A.
XX
XX 08-MAY-2002.
XX
XX 11-OCT-2000; 2000CN-00125684.
XX
XX 11-OCT-2000; 2000CN-00125684.
XX
XX (BODE-) BODE GENE DEV CO LTD SHANGHAI.
XX
XX Mao Y, Xie Y;
XX
XX WPI; 2002-549001/59.
XX
XX New polypeptide human p70 ribosome S6 kinase 26.29 and encoding
XX polynucleotides for treating malignant tumors, inflammations,
XX immunological diseases, hemopathy and human immunodeficiency virus
XX infection.
XX
XX Example 2; Page 17 (Disclosure); 34pp; Chinese.
XX
XX The present invention discloses one new kind of polypeptide, human p70
XX ribosome S6 kinase 26.29, polynucleotides encoding this polypeptide and
XX DNA recombination process to produce the polypeptide. The present
XX invention also discloses the method of applying the polypeptide in
XX treating various diseases, such as malignant tumours, inflammations,
XX immunological diseases, haemopathy and human immunodeficiency virus
XX infection (HIV). The present invention also discloses the antagonist
XX resisting the polypeptide and its treatment effect, and the application
XX of the polynucleotides encoding human p70 ribosome S6 kinase 26.29. This
XX sequence represents a reverse transcriptase PCR primer used to isolate
XX cDNA encoding the human p70 ribosome S6 kinase 26.29
XX
XX Sequence 24 BP; 4 A; 7 C; 11 G; 2 T; 0 U; 0 Other;

Query Match      0.9%; Score 16.2; DB 1; Length 24;
Best Local Similarity 85.7%; Pred. No. 3.7e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 97 GTTGTCGCGCGCCCGCGCG 117
Db 21 GCTTCTCGCGCGCTCCGCGC 1

RESULT 182
ABK23339
ID ABK23339 standard; DNA; 24 BP.
```

```
XX
AC ABK23339;
XX
XX 09-APR-2002 (first entry)
XX
XX Human Zmax1 cDNA forward PCR primer #251.
XX
XX Human; mouse; Zmax1; HBM; high bone mass gene; lipid regulation; stroke;
XX lipid-associated condition; arteriosclerosis; cardiovascular disease; ss;
XX osteoporosis; atherosclerosis; diabetic atherosclerosis; plaque build-up;
XX neurovascular condition; wound healing; gene therapy; PCR primer; probe;
XX bone development disorder; antiarteriosclerotic; cardiovascular;
XX osteopathic; cerebroprotective.
XX
XX Homo sapiens.
XX
XX WO2001192891-A2.
XX
XX 06-DEC-2001.
XX
XX 25-MAY-2001; 2001WO-US016946.
XX
XX 26-MAY-2000; 2000US-00578900.
XX
XX (GENO-) GENOME THERAPEUTICS CORP.
XX (UYCR-) UNIV CREIGHTON SCHOOL MEDICINE.
XX
XX Carulli JP, Little RD, Recker RR, Johnson ML;
XX
XX WPI; 2002-057784/13.
XX
XX Identifying molecules involved in lipid regulation, useful for
XX diagnosing, treating or preventing e.g. arteriosclerosis, comprises
XX identifying a molecule that binds to high bone mass gene or its
XX corresponding wild type gene.
XX
XX Disclosure; Page 42; 409pp; English.
XX
XX The invention relates to a method for identifying a molecule involved in
XX lipid regulation comprising identifying a molecule that binds to or
XX inhibits binding of a molecule to high bone mass (HBM) or its wild type
XX gene, Zmax1. Compounds identified by the method are useful for treating,
XX diagnosing, preventing or screening for normal and abnormal lipid-
XX associated conditions, including arteriosclerosis, cardiovascular
XX disease, stroke, and osteoporosis. The compounds may also be used in the
XX treatment or prevention of diabetic atherosclerosis, neurovascular
XX conditions caused by plaque build-up, poor circulation due to plaque
XX build-up and associated poor wound healing. The methods may be used in
XX gene therapy, pharmaceutical development, and diagnostic assays for bone
XX HBM systems can be used as surrogate markers in pharmaceutical
XX development, in diagnosis of human or animal bone disease, and in the
XX treatment of bone diseases. Sequences ABK22776-ABK23411 represent cDNA
XX molecules encoding human Zmax1 and HBM, and PCR primers, probes, linkers
XX and adapters of the invention
XX
XX Sequence 24 BP; 6 A; 8 C; 4 G; 6 T; 0 U; 0 Other;

Query Match      0.9%; Score 16.2; DB 1; Length 24;
Best Local Similarity 85.7%; Pred. No. 3.7e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 862 CTGAAGCAGTACTCGTGTGAC 882
Db 1 CTGAACCACTACTCTGTATGAC 21

RESULT 183
ACC45922
ID ACC45922 standard; DNA; 24 BP.
XX
XX ACC45922;
XX
```

```
DT 02-JUN-2003 (first entry)
XX Human HBM STS marker forward primer #251.
XX
XX Human; high bone mass; HBM; LRP5; LRP6; transgenic; bone mass modulation;
XX gene therapy; bone density modulation; bone strength; trabecular number;
XX bone size; bone tissue connectivity; bone disease; osteoporosis; PCR;
XX osteomalacia; rickets; Paget's disease; neoplasm of the bone; primer; ss.
XX
XX Homo sapiens.
XX
XX WO200292764-A2.
XX
XX 21-NOV-2002.
XX
XX 13-MAY-2002; 2002WO-US014876.
XX
XX 11-MAY-2001; 2001US-0290071P.
XX
XX 17-MAY-2001; 2001US-0291311P.
XX
XX 01-FEB-2002; 2002US-0353058P.
XX
XX 04-MAR-2002; 2002US-0361293P.
XX
XX (GENO-) GENOME THERAPEUTICS CORP.
XX (AMHP ) WYETH.
XX
XX Babij P, Bex FJ, Yaworsky PJ, Bodine PV;
XX
XX WPI; 2003-129278/12.
XX
XX New transgenic animals (e.g. mice), useful as models for studying bone
XX density modulation, developing drugs for treating or preventing bone
XX diseases (e.g. osteoporosis), or diagnosing diseases characterized by
XX reduced bone density.
XX
XX Disclosure; Page 58; 603pp; English.
XX
XX The invention relates to novel transgenic animals expressing the high
XX bone mass (HBM) gene, expressing the corresponding wild type HBM gene,
XX comprising an alteration of the gene encoding LRP5 or LRP6, or expressing
XX an LRP5 that is modulated by an altered gene control sequence introduced
XX by homologous or non-homologous recombination. The transgenic animals are
XX for the study of bone density modulation or bone mass modulation. The
XX invention has osteopathic and cytostatic activity. The polynucleotides of
XX the invention may have a use in gene therapy. The transgenic animals and
XX nucleic acids are for the study of bone density modulation, where the
XX bone mass is modulated relative to non-transgenic animals of the same
XX species in more than one parameter selected from bone density, bone
XX strength, trabecular number, bone size, or bone tissue connectivity. The
XX transgenic animals, nucleic acids and methods are useful for identifying
XX molecules involved in bone development, and for developing pharmaceutical
XX compositions, which may be employed for treating or preventing bone
XX diseases, e.g. osteoporosis, osteomalacia, rickets, Paget's disease, or
XX neoplasms of the bone. The transgenic animals and nucleic acids are also
XX useful in methods for diagnosing diseases involved in bone development, is
XX or characterised by reduced bone density or mass. The present sequence is
XX used in the exemplification of the invention
XX
XX Sequence 24 BP; 6 A; 8 C; 4 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 16.2; DB 1; Length 24;
XX Best Local Similarity 85.7%; Pred. No. 3.7e+02;
XX Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 862 CTGAAGCAGTACTCGATGAC 882
Db 1 CTGAACCACTACTGTATGAC 21
|||||
RESULT 184
AD98620
ID ADB98620 standard; DNA; 24 BP.
XX
XX ADB98620;
```

```
XX 04-DEC-2003 (first entry)
XX
XX Sequence tagged site #501 used to prepare Zmax1 (LRP5) gene region map.
XX
XX Osteopathic; Gene therapy; High Bone Mass; HBM; LRP5; Zmax1; LRP6;
XX bone mass modulation; osteoporosis; STS; sequence tagged site; ds.
XX
XX Homo sapiens.
XX
XX WO200292000-A2.
XX
XX 21-NOV-2002.
XX
XX 13-MAY-2002; 2002WO-US014877.
XX
XX 11-MAY-2001; 2001US-0290071P.
XX
XX 17-MAY-2001; 2001US-0291311P.
XX
XX 01-FEB-2002; 2002US-0353058P.
XX
XX 04-MAR-2002; 2002US-0361293P.
XX
XX (GENO-) GENOME THERAPEUTICS CORP.
XX (AMHP ) WYETH.
XX
XX Allen K, Anisowicz A, Graham JR, Morales A, Yaworsky PJ, Liu W;
XX
XX WPI; 2003-129214/12.
XX
XX New nucleic acid comprising a mutation in LRP5 or LRP6, useful for
XX diagnosing a HBM-like phenotype in a subject and for preparing a
XX composition for modulating bone mass and/or lipid levels in a subject
XX suffering from e.g. osteoporosis.
XX
XX Example 2; Page 64; 629pp; English.
XX
XX The present invention relates to High Bone Mass (HBM), LRP5 (Zmax1) and
XX LRP6 mutants, which results in a HBM-like phenotype when expressed in a
XX cell. The HBM-like phenotype results in bone mass modulation and/or lipid
XX level modulation. The invention is useful for diagnosing a HBM-like
XX phenotype in a subject and for preparing a composition for modulating
XX bone mass and/or lipid levels in a subject suffering from e.g.
XX osteoporosis. The present sequence is a sequence tagged site (STS)
XX marker, which was used to prepare a physical map of the Zmax1 (LRP5) gene
XX region.
XX
XX Sequence 24 BP; 6 A; 8 C; 4 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 16.2; DB 1; Length 24;
XX Best Local Similarity 85.7%; Pred. No. 3.7e+02;
XX Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 862 CTGAAGCAGTACTCGATGAC 882
Db 1 CTGAACCACTACTGTATGAC 21
|||||
RESULT 185
AAT67065/c
ID AAT67065 standard; DNA; 20 BP.
XX
XX AAT67065;
XX
XX 06-AUG-1997 (first entry)
XX
XX Soluble type I insulin-like growth factor receptor 3' PCR primer.
XX
XX Type I insulin-like growth factor receptor; IGF-IR; tumour; melanoma;
XX prostate cancer; ovary cancer; breast cancer; lung cancer;
XX smooth muscle cancer; apoptosis; gene therapy; primer; PCR;
XX polymerase chain reaction; ss.
XX
XX Synthetic.
XX
```

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PN WO9718241-A1.
XX
PD 22-MAY-1997.
XX
PF 13-NOV-1996; 96WO-US018327.
XX
PR 14-NOV-1995; 95US-0006699P.
XX
PA (UWJE-) UNIV JEFFERSON THOMAS.
XX
PI Baserga R, Resnicoff M, Dambrosio C, Ferber A;
XX WPI; 1997-289231/26.
XX
XX Soluble type I insulin-like growth factor receptor - used for inducing
PT resistance to tumour growth in a mammal.
XX
XX Example 2; Page 28; 65pp; English.
XX
XX A PCR fragment corresponding to human soluble type I insulin- like growth
CC factor receptor (IGF-1R) (see also AAT67063) was created using mutagenic
CC primers. The 5' primer (AAT67064) contains an artificial BamHI site and
CC corresponds to nucleotides 135-153. The 3' reverse primer (AAT67065)
CC contains 2 mismatches that result in the disruption of an AgeI site. The
CC PCR fragment was used in the construction of vector pGEX-5x-3/IFGIRsol.
CC Soluble IGF-1R (see also AAM15282) was expressed as a GST fusion protein
CC in E. coli BL21(DE3) transformants. Soluble IGF-1R can be used in methods
CC for inducing resistance to tumour growth in a mammal
XX
SQ Sequence 20 BP; 2 A; 7 C; 9 G; 2 T; 0 U; 0 Other;

Query Match 0.9%; Score 16; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 3.3e+02;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1100 GGTACCGGCCCTGGA 1115
DB 16 GGTACCGGCCCTGGA 1

RESULT 186
AAAX31942/C
ID AAAX31942 standard; DNA; 24 BP.
XX
AC AAAX31942;
XX
DT 16-JUN-1999 (first entry)
XX
DE Primer C used in the production of UDPAG.
XX
KW Uridine diphosphate-N-acetylglucosamine; UDPAG; microbial; fermentation;
KW uridine 5'-monophosphate; UMP; N-acetylglucosamine; AG kinase; drug;
KW PCR primer; ss.
XX
OS Synthetic.
XX
XX WO9911810-A1.
XX
XX 11-MAR-1999.
XX
PF 11-AUG-1998; 98WO-JP0033561.
XX
PR 29-AUG-1997; 97JP-00249461.
XX
PA (YAMA-) YAMASA CORP.
XX
PI Takenouchi K, Ishige K, Midorikawa Y, Okuyama K, Hamamoto T;
PI Noguchi T;
XX
XX WPI; 1999-243625/20.
XX
XX Microbial production of uridine diphosphate-N-acetylglucosamine.
XX
PS Example 6; Page 17; 38pp; Japanese.
XX
XX The invention relates to a process for producing Uridine diphosphate-N-
CC acetylglucosamine (UDPAG). UDPAG is prepared by microbial fermentation
CC from uridine 5'-monophosphate (UMP) and N-acetylglucosamine in the
CC presence of N-acetylglucosamine kinase (AG kinase). Efficient production
CC of UDPAG using N-acetylglucosamine as substrate. UDPAG is a key
CC intermediate in the synthesis of oligosaccharides for use as drugs and
CC functional materials. Sequences AAX31940 to AAX31953 represent primers
XX used during the course of the invention
XX
SQ Sequence 24 BP; 0 A; 4 C; 8 G; 12 T; 0 U; 0 Other;

Query Match 0.9%; Score 16; DB 1;
Best Local Similarity 79.2%; Pred. No. 4e+02;
Matches 19; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 666 AGGCAAAAGCAAGCTCACAGCAA 689
DB 24 ACGCACAAAGCAAGCAAAACAGCCAA 1

RESULT 187
ABL41245
ID ABL41245 standard; DNA; 24 BP.
XX
AC ABL41245;
XX
DT 16-MAY-2002 (first entry)
XX
DE Human neuregulin 55 PCR primer SEQ ID NO 3.
XX
KW Human; neuregulin 55; nervous system; development; neuropsychopathy;
KW tumour; inflammation; immunological disease; primer; ss.
XX
OS Homo sapiens.
XX
XX CN1324826-A.
XX
PD 05-DEC-2001.
XX
PF 19-MAY-2000; 2000CN-00115761.
XX
PR 19-MAY-2000; 2000CN-00115761.
XX
PA (BODE-) BODE GENE DEV CO LTD SHANGHAI.
XX
PI Mao Y, Xie Y;
XX
XX WPI; 2002-217507/28.
XX
PT New polypeptide human neuregulin 55 and polynucleotides for encoding
PT same.
XX
XX Example 3; Page 18 (Disclosure); 35pp; Chinese.
XX
XX The invention relates to human neuregulin 55, polynucleotide for coding
CC this polypeptide and a method for producing this polypeptide by using DNA
CC recombination technique. The invention also discloses the method for
CC curing several diseases, such as nervous system developmental diseases,
CC neuropsychopathy, other nervous system diseases, developmental diseases,
CC tumours, inflammations and immunological diseases by using said
CC polypeptide. The invention also discloses an antagonist for resisting
CC said polypeptide and its therapeutic action and also discloses the
CC application of polynucleotide to coding this novel human neuregulin 55.
CC The present sequence is that of a human neuregulin 55 primer, useful to
CC the invention
XX
SQ Sequence 24 BP; 7 A; 9 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 16; DB 1; Length 24;
Best Local Similarity 79.2%; Pred. No. 4e+02;
Matches 19; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

```

OY 1321 TACCCCAAGTACCGAGCGAGGCC 1344
DB 1 TACTCAAGTACCGAGCGAGGCC 24

RESULT 188
ABI83145
ID ABI83145 standard; DNA; 24 BP.

XX
AC ABI83145;

XX
DT 15-FEB-2002 (first entry)

XX
DE Capture oligonucleotide Zip ID#374 oligo #2.

XX Human; K-ras; PCR primer; probe; capture probe; mutation detection;
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
KW oncogene; tumour suppressor; human papillomavirus; forensic;
KW environmental monitoring; food industry; feed industry; ss.

XX
OS Synthetic.

XX
PN WO200179548-A2.

XX
PD 25-OCT-2001.

XX
PF 04-APR-2001; 2001WO-US010958.

XX
PR 14-APR-2000; 2000US-0197271P.

XX
PA (CORR) CORNELL RES FOUND INC.

XX
PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;

XX
XX WPI; 2002-034366/04.

XX
PT Designing capture oligonucleotide probes for use on a support to which
PT complementary oligonucleotides hybridize with little mismatch.

XX
XX Example 5; Fig 25; 300pp; English.

XX
CC The present invention describes a method (M1) for designing capture
CC oligonucleotide probes (I) for use on a support to which complementary
CC oligonucleotide probes (II) will hybridize with little mismatch, where
CC (I) have melting temperatures within a narrow range. The method is useful
CC for detecting infectious diseases caused by bacterial infectious agents
CC e.g. Salmonella, listeria monocytogenes and Haemophilus influenza, fungal
CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and
CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
CC Epstein-Barr virus and polio virus, and parasitic infectious agents
CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
CC medinensis. The method is also useful for detecting genetic diseases such
CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes
CC involved in DNA amplification, replication, recombination or repair, the
CC cancer is specifically associated with a gene selected from BRCA1 gene,
CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
CC method is also used for environmental monitoring, forensics and the food
CC and feed industry, detecting comprises scanning (using e.g. a scanning
CC electron microscope and infrared microscope) the support at the
CC particular sites and identifying if ligation of the oligonucleotide probe
CC sets occurred and correlating (using a computer) identified ligation to a
CC presence or absence of the target nucleotide sequences. ABI82074 to
CC ABI97546 represent oligonucleotide sequences used in the exemplification
CC of the present invention

XX
SQ Sequence 24 BP; 8 A; 6 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 0.9%; Score 16; DB 1; Length 24;
Best Local Similarity 79.2%; Pred. No. 4e+02;
Matches 19; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 994 AACCTGCTCATCAACGAGAGGGGA 1017
DB 1 AACGGGCTCATCACAGAGCGGGA 24

RESULT 189

ABI92410/c
ID ABI92410 standard; DNA; 24 BP.

XX
AC ABI92410;

XX
DT 15-FEB-2002 (first entry)

XX
DE Capture oligonucleotide Zip ID#374 oligo #3.

XX Human; K-ras; PCR primer; probe; capture probe; mutation detection;
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
KW oncogene; tumour suppressor; human papillomavirus; forensic;
KW environmental monitoring; food industry; feed industry; ss.

XX
OS Synthetic.

XX
PN WO200179548-A2.

XX
PD 25-OCT-2001.

XX
PF 04-APR-2001; 2001WO-US010958.

XX
PR 14-APR-2000; 2000US-0197271P.

XX
PA (CORR) CORNELL RES FOUND INC.

XX
PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;

XX
XX WPI; 2002-034366/04.

XX
PT Designing capture oligonucleotide probes for use on a support to which
PT complementary oligonucleotides hybridize with little mismatch.

XX
XX Claim 3; Fig 26; 300pp; English.

XX
CC The present invention describes a method (M1) for designing capture
CC oligonucleotide probes (I) for use on a support to which complementary
CC oligonucleotide probes (II) will hybridize with little mismatch, where
CC (I) have melting temperatures within a narrow range. The method is useful
CC for detecting infectious diseases caused by bacterial infectious agents
CC e.g. Salmonella, listeria monocytogenes and Haemophilus influenza, fungal
CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and
CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
CC Epstein-Barr virus and polio virus, and parasitic infectious agents
CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
CC medinensis. The method is also useful for detecting genetic diseases such
CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes
CC involved in DNA amplification, replication, recombination or repair, the
CC cancer is specifically associated with a gene selected from BRCA1 gene,
CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
CC method is also used for environmental monitoring, forensics and the food
CC and feed industry, detecting comprises scanning (using e.g. a scanning
CC electron microscope and infrared microscope) the support at the
CC particular sites and identifying if ligation of the oligonucleotide probe
CC sets occurred and correlating (using a computer) identified ligation to a
CC presence or absence of the target nucleotide sequences. ABI82074 to
CC ABI97546 represent oligonucleotide sequences used in the exemplification
CC of the present invention

XX
SQ Sequence 24 BP; 2 A; 8 C; 6 G; 8 T; 0 U; 0 Other;

Query Match 0.9%; Score 16; DB 1; Length 24;
Best Local Similarity 79.2%; Pred. No. 4e+02;
Matches 19; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Qy

994 AACCTGCTCATCAACGAGAGCGGA 1017
||| ||||||| ||||| |||||

Db

24 AACGGGCTCATCACAGAGACGGGA 1
||| ||||||| ||||| |||||

RESULT 190
AB183144/C
ID AB183144 standard; DNA; 24 BP.
XX
XX AB183144;
XX AC
XX XX
DT 15-FEB-2002 (first entry)
XX
XX DE
XX Capture oligonucleotide Zip ID#374 oligo #1.

XX	Human; K-ras; PCR primer; probe; capture probe; mutation detection;
XX	ligase detection reaction; LDR; p53; BRCA2; BRCA2; infectious disease;
KW	infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
KW	oncogene; tumour suppressor; human papillomavirus; forensic;
KW	environmental monitoring; food industry; feed industry; ss.
XX	Synthetic.
OS	

XX WO200179548-A2.
 XX
 PD 25-OCT-2001.
 XX
 PF 04-APR-2001; 2001WO-US010958.
 XX
 PR 14-APR-2000; 2000US-0197271P.
 XX
 PA (CORR) CORNELL RES FOUND INC


XX Designing capture oligonucleotide probes for use on a support to which
PT complementary oligonucleotides hybridize with little mismatch.
PT
XX Example 5; Fig 25; 300pp; English.
PS

The present invention describes a method (M1) for designing capture oligonucleotide probes (I) for use on a support to which complementary oligonucleotide probes (II) will hybridize with little mismatch, where (I) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents e.g. *Salmonella*, *Listeria* monocytogenes and *Haemophilus influenza*, fungal infectious agents e.g. *Cryptococcus neoformans*, *Candida albicans* and *Aspergillus fumigatus*, viruses e.g. T-cell lymphocytotropic virus, Epstein-Barr virus and polio virus, and parasitic infectious agents selected from *Onchocerca volvulus*, *Entamoeba histolytica* and *Dracunculus medialis*. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.

Detecting cancer involving oncogenes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, cancer is specifically associated with a gene selected from BCL2 gene, p53 gene, human papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the particular sites and identifying if ligation of the oligonucleotide probe sets occurred and correlating (using a computer) identified ligation to a presence or absence of the target nucleotide sequences. AB182074 to AB197546 represent oligonucleotide sequences used in the exemplification of the present invention

XX
SQ Sequence 24 BP; 2 A; 8 C; 6 G; 8 T; 0 U; 0 Other;
Query Match 0.9%; Score 16; DB 1; Length 24;
Best Local Similarity 79.2%; Pred. No. 4e+02;
Matches 19; Conservative 0; Mismatches 5; Indels

D

Qy	994 AACCTGCTCATCAACGAGAGGGGA 1017
	
Db	24 AACGGGCTCATCACAGAGACGGGA 1

RESULT 191
ABI92411
ID ABI92411 standard; DNA; 24 BP.
XX
XX ABI92411;
XX
XX
DT 15-FEB-2002 (first entry)
XX
XX
DE Capture oligonucleotide Zip ID#374 oligo #4.

KW Human; X-ras; PCR primer; probe; capture probe; mutation detection;
 ligase detection reaction; Luk; p53; BRCA1; BRCA2; infectious disease;
 infection; 21 hydroxylase deficiency; Turner syndrome; obesity; cancer;
 oncogene; tumour suppressor; human papillomavirus; forensic;
 environmental monitoring; food industry; feed industry; ss.
 XX
 OS Synthetic.

PN WO200179548-A2.
XX
XX
PD 25-OCT-2001.
XX
PF 04-APR-2001; 2001WO-US010958.
XX
PR 14-APR-2000; 2000US-0197271P-
XX
XX (CORR) CORNELL RES FOUND INC.
PA

XX Designing capture oligonucleotide probes for use on a support to which
PT complementary oligonucleotides hybridize with little mismatch.
XX
PS Claim 3; Fig 26; 300pp; English.

The present invention describes a method (M1) for designing capture oligonucleotide probes (I) for use on a support to which complementary oligonucleotide probes (II) will hybridise with little mismatch, where (I) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents e.g. *Salmonella*, *Listeria monocytogenes* and *Haemophilus influenza*, fungal infectious agents e.g. *Cryptococcus neoformans*, *Candida albicans* and *Aspergillus fumigatus*, viruses e.g. T cell lymphocytotropic virus, Epstein-Barr virus and polio virus, and parasitic infectious agents selected from *Onchocerca volvulus*, *Entamoeba histolytica* and *Dracunculus medinis*. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.

Detecting cancer involving oncogenes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BCRAl gene, p53 gene, human papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the particular sites and identifying (if ligation of the oligonucleotide probe succeeds or fails) the target nucleotide sequences. The presence or absence of the target nucleotide sequences. AB197546 represents oligonucleotide sequences used in the exemplification of the present invention

XX	Query Match	0.9%	Score 16;	DB 1;	Length 24;
XX	Best Local Similarity	79.2%;	Pred. No. 4e+02;		
SQ	Sequence 24 BP; 8 A; 6 C; 8 G; 2 T; 0 U; 0 Other;				
	Matches 19: Conservative	0: Mismatches	5: Indels	0: Gaps	0:

QY 994 AACCTGCTCATCAACGAGAGGGGA 1017
|||||
Db 1 AACGGGCTCATCACAGACGGGA 24

RESULT 192
AAA83175
ID AAA83175 standard; DNA; 19 BP.

XX AC AAA83175;
XX DT 04-DEC-2000 (first entry)
XX DE cdk7 ribozyme binding site #96.

XX KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX OS Mammalia.

XX PN WO200032765-A2.

XX PD 08-JUN-2000.

XX PF 06-DEC-1999; 99WO-US028772.

XX PR 04-DEC-1998; 98US-0110954P.

XX PA (IMMU-) IMMUSOL INC.

XX PI Tritz R, Welch PJ, Barber JR, Robbins JM;

XX DR WPI; 2000-412314/35.

XX PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.

XX PS Disclosure; Page 57; 109pp; English.

XX CC The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment

XX SQ Sequence 19 BP; 2 A; 4 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1028 TGGCTGACTTTGGCTGGC 1046
|||||
Db 1 TGGCAGATTTGGCTGGC 19

RESULT 193

AAA83176
ID AAA83176 standard; DNA; 19 BP.

XX AC AAA83176;

XX DT 04-DEC-2000 (first entry)

XX DE cdk7 ribozyme binding site #97.

XX KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX OS Mammalia.

XX PN WO200032765-A2.
XX PD 08-JUN-2000.
XX PF 06-DEC-1999; 99WO-US028772.
XX PR 04-DEC-1998; 98US-0110954P.
XX PA (IMMU-) IMMUSOL INC.
XX PI Tritz R, Welch PJ, Barber JR, Robbins JM;
XX DR WPI; 2000-412314/35.
XX PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.
XX PS Disclosure; Page 57; 109pp; English.

XX CC The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment

XX SQ Sequence 19 BP; 2 A; 5 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 19;

Best Local Similarity 89.5%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1029 GGCTGACTTTGGCTGGCC 1047
|||||

Db 1 GGCAGATTTGGCTGGCC 19

RESULT 194

AAA84307

ID AAA84307 standard; DNA; 19 BP.

XX AC AAA84307;

XX DT 04-DEC-2000 (first entry)

XX DE Cyclin D2 ribozyme binding site #4.

XX KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.

XX OS Mammalia.

XX PN WO200032765-A2.

XX PD 08-JUN-2000.

XX PF 06-DEC-1999; 99WO-US028772.

XX PR 04-DEC-1998; 98US-0110954P.

XX PA (IMMU-) IMMUSOL INC.

XX PI Tritz R, Welch PJ, Barber JR, Robbins JM;

XX DR WPI; 2000-412314/35.

XX PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.

```
PS Disclosure; Page 75; 109pp; English.
XX
CC The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX
SQ Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 993 GAACCTGCTCATCAACGAG 1011
Db 1 GAACCTGCTCACCATCGAG 19
RESULT 195
AAA83174
ID AAA83174 standard; DNA; 19 BP.
XX
AC AAA83174;
XX
DT 04-DEC-2000 (first entry)
XX
DE cdk7 ribozyme binding site #95.
XX
KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
OS Mammalia.
XX
PN WO200032765-A2.
XX
PD 08-JUN-2000.
XX
PF 06-DEC-1999; 99WO-US028772.
XX
PR 04-DEC-1998; 98US-0110954P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Tritz R, Welch PJ, Barber JR, Robbins JM;
XX
DR WPI; 2000-412314/35.
XX
PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.
XX
PS Disclosure; Page 57; 109pp; English.
XX
CC The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX
SQ Sequence 19 BP; 2 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1027 CTGGCTGACTTTGGCCTGG 1045
Db 1 CTGGCAGATTTTGGCCTGG 19
RESULT 196
AAH59469
ID AAH59469 standard; DNA; 19 BP.
XX
AC AAH59469;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cyclin D2 ribozyme binding site SEQ ID NO:1893.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnery;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
XX
OS Synthetic.
XX
PN WO200130362-A2.
XX
PD 03-MAY-2001.
XX
PF 26-OCT-2000; 2000WO-US029500.
XX
PR 26-OCT-1999; 99US-0161532P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Robbins JM, Tritz R;
XX
DR WPI; 2001-300427/31.
XX
PT Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
PS Example 1; Page 209; 408pp; English.
XX
CC The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC ophthalmological, vulnery, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```


QY 993 GAACCTGCTCATCAACGAG 1011
 DB 1 GAACCTGCTCACCATCGAG 19

RESULT 197

AAH58336

ID AAH58336 standard; DNA; 19 BP.

AC AAH58336;

XX

DT 10-SEP-2001 (first entry)

XX

DE Cell-cycle dependent kinase cdk7 ribozyme binding site SEQ ID NO:760.

XX

KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;

KW recognition site; target; ribozyme binding site; eye disease; vulnery;

KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;

KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;

KW matrix metalloproteinase; growth factor; reductase; scarring; cytotstatic;

KW antipsoiatric; dermatological; antiseborrheic; antidiabetic; virucide;

KW antiskilling; ophthalmological; keratolytic; gene therapy; viral wart;

KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;

KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;

KW sickle cell retinopathy; ss.

XX

OS Homo sapiens.

OS Synthetic.

XX

PN WO200130362-A2.

XX

PD 03-MAY-2001.

XX

XX 26-OCT-2000; 2000WO-US029500.

XX

XX 26-OCT-1999; 99US-0161532P.

XX

XX (IMMU-) IMMUSOL INC.

XX

PI Robbins JM, Tritz R;

XX

DR WPI; 2001-300427/31.

XX

XX Treating proliferative skin or eye diseases and scarring, using ribozymes

PT that cleave RNA encoding cytokines involved in inflammation, matrix

PT metalloproteinases, growth factors and cell-cycle dependent kinases.

XX

XX Example 1; Page 127; 408pp; English.

XX

PS The present invention describes a method for treating a proliferative

CC skin or eye disease and scarring. The method involves administering a

CC ribozyme (I) which cleaves RNA encoding a cytokine involved in

CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle

CC dependent kinase, growth factor or a reductase, or administering a

CC nucleic acid molecule (II) comprising a promoter operably linked to a

CC nucleic acid segment encoding (I). (I) can have antipsoiatric,

CC dermatological, cytostatic, antiseborrheic, antidiabetic, antiskilling,

CC ophthalmological, vulnery, keratolytic and virucide activities, and

CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used

CC in gene therapy. (I) and (II) are useful for treating proliferative skin

CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,

CC squamous or basal cell carcinoma and viral or seborrheic wart. They can

CC also be used for treating proliferative eye diseases such as diabetic

CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of

CC prematurity and retinal detachment, and for treating and preventing

CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn

CC scar. AAH57577 to AAH62099 represent sequences used in the

CC exemplification of the present invention

XX

XX Sequence 19 BP; 2 A; 4 C; 7 G; 6 T; 0 U; 0 Other;

XX

XX Query Match 0.9%; Score 15.8; DB 1; Length 19;

XX Best Local Similarity 89.5%; Pred. No. 3.4e+02;

XX

Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1027 CTGGCTGACTTGGCTGG 1045

DB 1 CTGGCAGATTTGGCTGG 19

RESULT 198

AAH58337

ID AAH58337 standard; DNA; 19 BP.

XX

AC AAH58337;

XX

DT 10-SEP-2001 (first entry)

XX

DE Cell-cycle dependent kinase cdk7 ribozyme binding site SEQ ID NO:761.

XX

KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;

KW recognition site; target; ribozyme binding site; eye disease; vulnery;

KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;

KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;

KW matrix metalloproteinase; growth factor; reductase; scarring; cytotstatic;

KW antipsoiatric; dermatological; antiseborrheic; antidiabetic; virucide;

KW antiskilling; ophthalmological; keratolytic; gene therapy; viral wart;

KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;

KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;

KW sickle cell retinopathy; ss.

XX

OS Homo sapiens.

OS Synthetic.

XX

PN WO200130362-A2.

XX

XX 03-MAY-2001.

XX

XX 26-OCT-2000; 2000WO-US029500.

XX

XX 26-OCT-1999; 99US-0161532P.

XX

XX (IMMU-) IMMUSOL INC.

XX

XX Robbins JM, Tritz R;

XX

XX WPI; 2001-300427/31.

XX

XX Treating proliferative skin or eye diseases and scarring, using ribozymes

PT that cleave RNA encoding cytokines involved in inflammation, matrix

PT metalloproteinases, growth factors and cell-cycle dependent kinases.

XX

XX Example 1; Page 127; 408pp; English.

XX

PS The present invention describes a method for treating a proliferative

CC skin or eye disease and scarring. The method involves administering a

CC ribozyme (I) which cleaves RNA encoding a cytokine involved in

CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle

CC dependent kinase, growth factor or a reductase, or administering a

CC nucleic acid molecule (II) comprising a promoter operably linked to a

CC nucleic acid segment encoding (I). (I) can have antipsoiatric,

CC dermatological, cytostatic, antiseborrheic, antidiabetic, antiskilling,

CC ophthalmological, vulnery, keratolytic and virucide activities, and

CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used

CC in gene therapy. (I) and (II) are useful for treating proliferative skin

CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,

CC squamous or basal cell carcinoma and viral or seborrheic wart. They can

CC also be used for treating proliferative eye diseases such as diabetic

CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of

CC prematurity and retinal detachment, and for treating and preventing

CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn

CC scar. AAH57577 to AAH62099 represent sequences used in the

CC exemplification of the present invention

XX

XX Sequence 19 BP; 2 A; 4 C; 7 G; 6 T; 0 U; 0 Other;

XX

XX Query Match 0.9%; Score 15.8; DB 1; Length 19;

XX Best Local Similarity 89.5%; Pred. No. 3.4e+02;

XX

Query Match 0.9%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1028 TGGCTGACTTTGGCCTGGC 1046
|||||
Db 1 TGGCAGATTTGGCCTGGC 19

RESULT 199
AAH58338
ID AAH58338 standard; DNA; 19 BP.
XX AC AAH58338;
DT 10-SEP-2001 (first entry)
XX Cell-cycle dependent kinase cdk7 ribozyme binding site SEQ ID NO:762.
DE Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulneryary;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisticking; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX Homo sapiens.
OS Synthetic.
XX WO200130362-A2.
FN 03-MAY-2001.
PD 26-OCT-2000; 2000WO-US029500.
PF 26-OCT-1999; 99US-0161532P.
PR (IMMU-) IMMUSOL INC.
XX Robbins JM, Tritz R;
PI WPI; 2001-300427/31.
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
XX that cleave RNA encoding cytokines involved in inflammation, matrix
XX metalloproteinases, growth factors and cell-cycle dependent kinases.
PS Example 1; Page 127; 408pp; English.

XX The present invention describes a method for treating a proliferative
XX skin or eye disease and scarring. The method involves administering a
XX ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX dependent kinase, growth factor or a reductase, or administering a
XX nucleic acid molecule (II) comprising a promoter operably linked to a
XX nucleic acid segment encoding (I). (I) can have antiproliferative,
XX dermatological, cytostatic, antiseborrheic, antidiabetic, antisticking,
XX ophthalmological, vulneryary, keratolytic and virucide activities, and
XX cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX in gene therapy. (I) and (II) are useful for treating proliferative skin
XX diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX also be used for treating proliferative eye diseases such as diabetic
XX retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
XX prematurity and retinal detachment, and for treating and preventing
XX scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
XX scar. AAH57577 to AAH62099 represent sequences used in the
XX exemplification of the present invention

SQ Sequence 19 BP; 2 A; 5 C; 7 G; 5 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 3.4e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1029 GGCTGACTTTGGCCTGGCC 1047
|||||
Db 1 GGCAATTTGGCCTGGCC 19

RESULT 200
AAH66612
ID AAH66612 standard; DNA; 20 BP.
XX AC AAH66612;
DT 09-OCT-2000 (first entry)
XX Dog genomic marker oligonucleotide sequence SEQ ID NO:474.
DE Dog; genome; genomic marker; radiation hybrid map; identification;
KW chromosome location; gene marker; polymorphic microsatellite marker;
KW phenotype; behaviour; pedigree; ss.
XX Canis familiaris.
OS WO200029615-A2.
FN 25-MAY-2000.
PD 15-NOV-1999; 99WO-IB001907.
PF 13-NOV-1998; 98US-0108193P.
PR (CNRS) CNRS CENT NAT RECH SCI.
XX Galibert F, Andre C;
PI WPI; 2000-387821/33.
XX New radiation hybrid map of the dog, Canine familiaris, genome, useful
XX for e.g. identifying genes implicated in phenotypic and behavioral traits
XX or in genetic diseases and for studying dog pedigrees.
PS Claim 1; Page 73; 87pp; English.

XX The present invention describes a radiation hybrid map of the dog (Canine
XX familiaris) genome comprising the genome location of a marker selected
XX from AAH66139 to AAH66942. The radiation hybrid map is useful for
XX identifying and localising dog genes, since it covers approximately 80 %
XX of the dog genome and provides a dense map integrating different types
XX (i.e. Type I and Type II) of markers. The map and the dog genome markers
XX (or complementary sequences) are especially useful to identify genes
XX responsible for phenotypic and behavioural traits in dogs, to identify
XX morbid genes, to analyse diseases and identify implicated genes in such
XX diseases and their alleles and to study dog pedigrees. They may also be
XX useful for isolating corresponding human gene sequences e.g. genes
XX involved in genetic diseases

SQ Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 3.6e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1437 GGATGCCATGAACATCCA 1455
|||||
Db 1 GGATTCATGACATCCA 19

RESULT 201
AAH66524

AAAG6524 standard; DNA; 20 BP.
AAA66524;
09-OCT-2000 (first entry)
Dog genomic marker oligonucleotide sequence SEQ ID NO:386.
Dog; genome; genomic marker; radiation hybrid map; identification;
chromosome location; gene marker; polymorphic microsatellite marker;
phenotype; behaviour; pedigree; ss.
Canis familiaris.
WO200029615-A2.
25-MAY-2000.
15-NOV-1999; 99WO-IB001907.
13-NOV-1999; 98US-0108193P.
(CNRS) CNRS CENT NAT RECH SCI.
Galibert F, Andre C;
WPI; 2000-387821/33.
New radiation hybrid map of the dog, Canine familiaris, genome, useful
for e.g. identifying genes implicated in phenotypic and behavioral traits
or in genetic diseases and for studying dog pedigrees.
Claim 1; Page 69; 87pp; English.
The present invention describes a radiation hybrid map of the dog (Canine
familiaris) genome comprising the genome location of a marker selected
from AAA66139 to AAA66942. The radiation hybrid map is useful for
identifying and localising dog genes, since it covers approximately 80 %
of the dog genome and provides a dense map integrating different types
(i.e. Type I and Type II) of markers. The map and the dog genome markers
(or complementary sequences) are especially useful to identify genes
responsible for phenotypic and behavioural traits in dogs, to identify
morbid genes, to analyse diseases and identify implicated genes in such
diseases and their alleles, and to study dog pedigrees. They may also be
useful for isolating corresponding human gene sequences e.g. genes
involved in genetic diseases
Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 3.6e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1437 GGATGCCATGAACATCCA 1455
Db 1 GGATCCATGAGACATCCA 19
RESULT 202
AAF72934
ID AAF72934 standard; DNA; 20 BP.
XX AAF72934;
XX 24-APR-2001 (first entry)
XX Human daxe inhibitory antisense phosphorothioate oligonucleotide SEQ:35.
XX Antisense oligonucleotide; daxe; inhibition; phosphorothioate;
XX Fas binding protein; CENP-C binding protein; dap6; EAP; cytostatic;
XX antiinflammatory; death associated protein 6; Bts-1 associated protein;
XX infection; inflammation; tumour formation; ss.
XX

OS Homo sapiens.
XX US6180353-B1.
XX 30-JAN-2001.
PD 24-JAN-2000; 2000US-00490692.
PF 24-JAN-2000; 2000US-00490692.
PR 24-JAN-2000; 2000US-00490692.
XX (ISIS-) ISIS PHARM INC.
XX Dean NM, Cowsert LM;
XX WPI; 2001-217744/22.
XX Novel antisense compounds capable of modulating expression of daxe useful
for diagnosis, prophylaxis and treatment of diseases associated with
expression of daxe.
XX Claim 1; Col 42; 59pp; English.
XX The present invention describes an antisense compound (I) up to 30
nucleobases in length, where (I) inhibits expression of daxe (also known
as Fas binding protein, CENP-C binding protein, dap6 for death associated
protein 6 and EAP for Bts-1 associated protein). (I) has cytostatic and
antiinflammatory activity, and can be used in antisense therapy and as a
modulator of daxe. (I) is useful for inhibiting the expression of daxe in
cells or tissues in vitro. (I) can be utilised for diagnostics, expression
therapeutics for the treatment of diseases associated with the expression
of daxe, prophylaxis e.g. to prevent or delay infection, inflammation or
tumour formation and as research reagent. The present sequence represents
an inhibitory human daxe antisense phosphorothioate oligonucleotide which
is used in the exemplification of the present invention
Sequence 20 BP; 3 A; 3 C; 10 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 3.6e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 229 ACTGTGCTGTGGCGCA 247
Db 2 ATTGAGGTGTGGCGCA 20
RESULT 203
ABQ74636/c
ID ABQ74636 standard; DNA; 20 BP.
XX ABQ74636;
AC ABQ74636;
XX 24-OCT-2002 (first entry)
XX CDC2 gene antisense PCR primer SEQ ID NO:68.
XX Human; PCR primer; identification; tumour senescence; cytotoxic; ss;
XX abnormal cell proliferation; neoplastic cell growth; growth-inhibitory.
XX Homo sapiens.
OS Synthetic.
XX WO2000261134-A2.
XX 08-AUG-2002.
XX 21-DEC-2001; 2001WO-US050574.
XX 21-DEC-2000; 2000US-0257907P.
PR 17-DEC-2001; 2001US-00257907.
XX (UNII) UNIV ILLINOIS FOUND.
XX

PI Roninson IB, Chang B;
XX WPI; 2002-619266/66.
XX
XX Identifying a compound that induces senescence in a mammalian p53
PT deficient or tumor cell comprises assaying expression of cellular genes
PT in the presence of the compound with expression of the genes in the
PT absence of the compound.
XX
XX Example 4; Page 50; 73pp; English.
XX
XX The present invention describes a method for identifying a compound that
CC induces senescence in a mammalian cell comprising culturing the cell in
CC the presence and absence of the compound, assaying expression of at least
CC one cellular gene (G1a) from 56 or a gene (G2) from 64 genes, with
CC corresponding accession numbers given in the specification, and
CC identifying compounds that induce senescence when expression of (G1a) or
CC expression of (G2) is lower, in the presence of the compound. Also
CC described: (1) a compound that induces senescence in a mammalian cell;
CC (2) assessing efficacy of a treatment of a disease or condition relating
CC to abnormal cell proliferation or neoplastic cell growth; (3) treating a
CC disease or condition relating to abnormal cell proliferation or
CC neoplastic cell growth; or (4) identifying a compound that inhibits
CC senescence-associated induction of cellular gene expression. The compound
CC is useful for treating or for assessing efficacy of treatment of a
CC disease or condition relating to abnormal cell proliferation or
CC neoplastic cell growth. The compound of the invention has a growth-
CC inhibitory effect without producing systemic side effects found with
CC other growth-inhibitory compounds. ABQ74611 to ABQ74734 represent PCR
CC primers which are used in an example from the present invention
XX
SQ Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred No. 3.6e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Oy 1024 AAGCTGGCTGACTTTGCC 1042
Dy 19 AAAGTGGCTGACTTTGCC 1
RESULT 204
ABZ90528/C
ID ABZ90528 standard; DNA; 20 BP.
XX
XX AC ABZ90528;
XX
XX 17-OCT-2003 (first entry)
XX
XX Human oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
XX
XX WO200285308-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 24-APR-2001; 2001US-0286137P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;

XX
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX PS Disclosure; SEQ ID NO 6170; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred No. 3.6e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Oy 1018 GAGCTCAAGCTGGCTGACT 1036
Dy 20 GAGCTCACCTGGCTGACT 2
RESULT 205
ABZ98911/C
ID ABZ98911 standard; DNA; 20 BP.
XX
XX AC ABZ98911;
XX
XX 17-OCT-2003 (first entry)
XX
XX Human PDE4A oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
XX
XX WO200285308-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 24-APR-2001; 2001US-0286137P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.
 XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX
 PS Disclosure; SEQ ID NO 14153; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antinflammatory steroid and ubiquinone. A composition of the invention
 CC has antinflammatory, antiasthmatic, antiallergic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 3.6e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 535 AGCCCATCTTTGACAAAGC 553
 Db 20 AGCCCATCTGTGACAAAGC 2
 |||||
 RESULT 206
 ABZ86780/C
 ID ABZ86780 standard; DNA; 20 BP.
 AC ABZ86780;
 DT 17-OCT-2003 (first entry)
 DE Human oligonucleotide sequence.
 XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antinflammatory steroid; ubiquinone; antinflammatory; antiasthmatic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200285308-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013135.
 XX
 PR 24-APR-2001; 2001US-0286137P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyece JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.
 XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX
 PS Claim 15; SEQ ID NO 2022; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antinflammatory steroid and ubiquinone. A composition of the invention
 CC has antinflammatory, antiasthmatic, antiallergic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 3.6e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 929 AGCTGCTCGTGCGCTGCGC 947
 Db 19 AGCTGATCCGAGGCGCTGCGC 1
 |||||
 RESULT 207
 AAF97316
 ID AAF97316 standard; DNA; 21 BP.
 AC AAF97316;
 DT 06-JUN-2001 (first entry)
 DE Human gene single nucleotide polymorphism #2077.
 XX
 KW Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
 KW polymorphism; vascular disease; coronary artery disease; forensics;
 KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
 KW pulmonary embolism; paternity test; ds.
 XX
 OS Homo sapiens.
 XX
 PN Key Location/Qualifiers
 FT Variation replace(11,T)
 FT /*tag= a
 FT /standard_name= "single nucleotide polymorphism"
 XX
 PN WO200118250-A2.
 XX
 PD 15-MAR-2001.
 XX
 PF 07-SEP-2000; 2000WO-US024503.
 XX
 PR 10-SEP-1999; 99US-0153357P.
 PR 26-JUL-2000; 2000US-0220947P.
 PR 16-AUG-2000; 2000US-0225724P.

```
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
PA (MILL-) MILLENNIUM PHARM INC.
XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JJ;
XX WPI; 2001-226749/23.
XX Nucleic acids comprising single nucleotide polymorphisms, useful in
XX applications such as forensics, paternity testing, medicine, genetic
XX analysis and phenotype correlations to diseases such as diabetes and
XX atherosclerosis.
XX Example; Page 189; 242pp; English.
XX The present invention provides a method of diagnosing a vascular disease
XX in an individual, involving determining the sequence at various
XX polymorphic sites within the human thrombospondin 1 and thrombospondin 4
XX genes. The sequences at a number of polymorphic sites are also provided
XX in the specification. In particular, the method can be used in the
XX diagnosis of atherosclerosis, myocardial infarction, coronary heart
XX disease, stroke, peripheral vascular diseases, venous thromboembolism and
XX pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
XX useful in forensics, paternity testing, genetic analysis and phenotype
XX correlations to diseases. The present sequence is an example of one of
XX the human gene SNPs shown in the specification
XX
SQ Sequence 21 BP; 2 A; 5 C; 8 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 3.8e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1027 CTGGCTGACTTGGCCCTGG 1045
   ||| ||||| ||||| |||||
DB 3 CTCGGTGACTTGGCCCTGG 21

RESULT 208
AAH62396
ID AAH62396 standard; DNA; 21 BP.
XX
AC AAH62396;
XX
DT 12-SEP-2001 (first entry)
XX
DE NFE2L1 polymorphism containing DNA fragment #297.
XX
KW Single nucleotide polymorphism; SNP; human; cancer; inflammation;
KW heart disease; paternity testing; forensic science; ds.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Variation replace(11,C)
FT /*tag= a
FT /standard_name= "single nucleotide polymorphism"
XX
XX WO200138576-A2.
XX
XX 31-MAY-2001.
XX
XX 17-NOV-2000; 2000WO-US031639.
XX
XX 24-NOV-1999; 99US-0167334P.
XX
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX
XX Gargill M, Ireland JS, Lander ES;
XX
XX WPI; 2001-367705/38.
XX
XX New nucleic acid segments of the human genome, particularly from genes
```

```
PT including polymorphic sites,for phenotype correlation, forensics,
PT paternity testing, medicine and genetic analysis.
XX
XX Claim 1; Page 53; 80pp; English.
XX
XX DNA sequences AAH62100 - AAH62688 represent segments of human genes which
XX contain single nucleotide polymorphisms (SNPs). A method is included in
XX the invention for analysing a nucleic acid sample, which consists of
XX determining the base occupying any one of the polymorphic sites given in
XX the SNP containing sequences. The nucleotide sequences can be used in the
XX diagnosis or monitoring of diseases, such as cancer, inflammation, heart
XX diseases, diseases of the cardiovascular system, and infection by
XX microorganisms. The oligonucleotides are also useful in the manufacture
XX of a medicament for the treatment or prophylaxis of the diseases, and as
XX a pharmaceutical. SNP containing oligonucleotides are useful in
XX applications such as phenotype correlation, forensics, paternity testing,
XX medicine and genetic analysis
XX
SQ Sequence 21 BP; 5 A; 5 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 3.8e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 43 GGAGGACCCAGCGCTGTGAC 61
   ||||| ||||| ||||| |||||
DB 2 GGAGGACCTGCAGCGTGAC 20

RESULT 209
ABX72455/c
ID ABX72455 standard; DNA; 22 BP.
XX
AC ABX72455;
XX
DT 03-JUN-2003 (first entry)
XX
DE Human NOVX DNA PCR primer #120.
XX
KW Human; PCR; ss; metabolic disorder; cardiomyopathy; diabetes; ASD;
KW hypertension; congenital heart defect; aortic stenosis; valve disease;
KW atrial septal defect; atrioventricular canal defect; ductus arteriosus;
KW pulmonary stenosis; subaortic stenosis; ventricular septal defect; VSD;
KW tuberculous sclerosis; scleroderma; atherosclerosis; infectious disease;
KW obesity; anorexia; neurodegenerative disorder; Alzheimer's disease;
KW Parkinson's disease; immune disorder; haematopoietic disorder; primer;
KW haemophilia; hypercoagulation; Crohn's disease; cancer.
XX
XX Homo sapiens.
XX
XX WO200281498-A2.
XX
XX 17-OCT-2002.
XX
XX 03-APR-2002; 2002WO-US010780.
XX
XX 03-APR-2001; 2001US-0281086P.
XX 03-APR-2001; 2001US-0281136P.
XX 05-APR-2001; 2001US-0281863P.
XX 06-APR-2001; 2001US-0281906P.
XX 10-APR-2001; 2001US-0282020P.
XX 10-APR-2001; 2001US-0282930P.
XX 12-APR-2001; 2001US-0282934P.
XX 13-APR-2001; 2001US-028312P.
XX 13-APR-2001; 2001US-0283710P.
XX 17-APR-2001; 2001US-0284234P.
XX 19-APR-2001; 2001US-0285325P.
XX 20-APR-2001; 2001US-0285381P.
XX 20-APR-2001; 2001US-0285609P.
XX 23-APR-2001; 2001US-0285748P.
XX 23-APR-2001; 2001US-0285890P.
XX 24-APR-2001; 2001US-0286068P.
XX 25-APR-2001; 2001US-0286292P.
```

PR 27-APR-2001; 2001US-0287213P.
PR 02-MAY-2001; 2001US-0288257P.
PR 29-MAY-2001; 2001US-0294164P.
PR 30-MAY-2001; 2001US-0294484P.
PR 18-JUN-2001; 2001US-0298952P.
PR 19-JUN-2001; 2001US-0299377P.
PR 19-JUN-2001; 2001US-0299276P.
PR 12-SEP-2001; 2001US-0318750P.
PR 25-SEP-2001; 2001US-0324800P.
PR 25-SEP-2001; 2001US-0324802P.
PR 27-SEP-2001; 2001US-0325684P.
PR 17-OCT-2001; 2001US-0330143P.
PR 14-NOV-2001; 2001US-0332131P.
PR 14-NOV-2001; 2001US-0332240P.
PR 14-NOV-2001; 2001US-0332779P.
PR 21-NOV-2001; 2001US-0332115P.
PR 04-DEC-2001; 2001US-0337621P.
PR 03-JAN-2002; 2002US-0345783P.
PR 16-JAN-2002; 2002US-0350251P.
PR 02-APR-2002; 2002US-00114270.
XX
FA (CURA-) CURAGEN CORP.
XX
XX Guo X, Kekuda R, Miller CE, Malyankar UM, Spytek KA;
PI Parturajan M, Liu X, Gusev VV, Li L, Vernet CAM, Zerhusen RD;
PI Gorman L, Shenoy SG, Pena CE, Smithson G, Burgess CE, Gerlach V;
PI Padigar M, Shinkets RA, Gangolli EA, Raupier RJ, Casman SJ, Ji W;
PI Anderson DW, Leite MW, Rastelli L, Edinger SR, Stone DJ;
PI MacDougall JR, Rothenberg ME, Mazur A, Millet I, Peyman JA;
PI Ellerman K;
XX
DR WPI; 2003-046858/04.
XX
XX New isolated NOVX polypeptide useful for treating atherosclerosis,
PT metabolic disorders, diabetes, obesity, infectious disease, anorexia,
PT neurodegenerative disorders, Alzheimer's disease and cancer.
XX
XX Example 83; Page 545; 666pp; English.
XX
XX The invention relates to human polypeptides, termed NOVX, and the
CC polynucleotides encoding them. The polypeptides and polynucleotides are
CC useful for diagnosing disease, and screening for potential therapeutic
CC agents. The sequences are useful for treating metabolic disorders,
CC cardiomyopathy, diabetes, hypertension, congenital heart defects, aortic
CC stenosis, atrial septal defect (ASD), atrioventricular canal defect,
CC ductus arteriosus, pulmonary stenosis, subaortic stenosis, ventricular
CC septal defect (VSD), valve diseases, tuberculous sclerosis, scleroderma,
CC atherosclerosis, obesity, infectious disease, anorexia, neurodegenerative
CC disorders, Alzheimer's disease, Parkinson's disease, immune disorders,
CC haematopoietic disorders, haemophilia, hypercoagulation, Crohn's disease
CC and cancer. This sequence represents a PCR primer used to amplify a human
CC NOVX polynucleotide of the invention
XX
SQ Sequence 22 BP; 4 A; 8 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 22;
Best Local Similarity 89.5%; Pred. No. 4e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 846 GTACCTGGACAGGACCTG 864
DB 20 GTACCTGGAGAGTACCTG 2

RESULT 210
AAH47509
ID AAH47509 standard; DNA; 23 BP.
XX
XX AAH47509;
XX
XX 30-NOV-2001 (first entry)
DT
XX Forward primer used in the construction of plasmid pSM847.

XX Cloning vector; pSM843; rep gene; ORF81; trbA; para; cad operon;
KW antibiotic resistance; caduim; SoxA; SoxB; SoxC; sox enzyme;
KW Rhodococcus; sulfur; fossil fuel; promoter; PCR primer; ss.
XX
OS Synthetic.
XX
XX EF1127943-A2.
XX
XX 29-AUG-2001.
XX
XX 19-FEB-2001; 2001EP-00200582.
XX
XX 24-FEB-2000; 2000IT-MI000332.
XX
XX (ENIE) ENITECNOLOGIE SPA.
XX
XX Margarit Y Rosi, Serbolisca LP, De Ferra F, Rodriguez F;
PI
XX WPI; 2001-551402/62.
DR
XX
XX Plasmid vector of Rhodococcus for producing proteins such as enzymes
PT involved in the removal of organic sulfur from fossil fuels, comprises a
PT para gene, genes encoding proteins involved in replication, and a genetic
PT marker.
XX
XX Example 7; Page 8; 24pp; English.
XX
XX The invention provides a cloning vector pSM843, comprising the rep genes
CC ORF81 and trbA (encoding proteins involved in replication in
CC Rhodococcus), the gene para, and at least one gene which encodes a
CC genetic marker (selected from the cad operon) that confers resistance to
CC caduim or an antibiotic. The rep genes are useful for producing
CC homologous or heterologous proteins of interest such as enzymes involved
CC in the selective removal of organic sulfur from fossil fuels (SoxA, SoxB,
CC SoxC), L-amino acids, enantiomorphs of chiral compounds and carboxylic
CC acids in a microorganism. The proteins are preferably sox enzymes.
CC Microorganisms such as Rhodococcus, Gordona and Nocardia containing the
CC sox operon downstream to the constitutive promoter, in particular
CC Rhodococcus strain SMV114 CBS 102447, transformed with the vector are
CC useful for removing organic sulfur from fossil fuels. The expression
CC vector has high stability in the absence of selective pressure in the
CC transformed strains of Rhodococcus. The present sequence represents a PCR
CC primer used in the construction of the vector pSM847
XX
SQ Sequence 23 BP; 7 A; 4 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 23;
Best Local Similarity 89.5%; Pred. No. 4.2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 414 GAGAGTGGTATGCGCAAC 432
DB 5 GAGAGTGCATATGCGGAC 23

RESULT 211
ABV74691/C
ID ABV74691 standard; DNA; 24 BP.
XX
XX AC ABV74691;
XX
XX 03-FEB-2003 (first entry)
DT
XX Human ribosomal protein S4-18.04 PCR primer #1.
XX
XX Human ribosomal protein S4-18.04; tumour; haemopathy; HIV infection;
KW immunological disease; inflammation; cytostatic; anti-HIV; PCR; primer;
KW ss.
XX
XX Homo sapiens.
XX
XX CNI345823-A.
PN

RESULT 214
ABSS9078
ID ABS9078 standard; DNA; 22 BP.
XX
XX
AC ABS9078;
XX
DT 05-NOV-2002 (first entry)
XX
DE Human G-protein coupled receptor, forward primer #76.
XX
KW Human; G-protein coupled receptor; GPCR; cardiomyopathy; atherosclerosis;
KW diabetes; cell signal processing; metabolic pathway modulation; cancer;
KW adenocarcinoma; lymphoma; prostate cancer; uterus cancer; asthma;
KW immune response; neurodegenerative disorder; inflammatory disorder;
KW Crohn's disease; multiple sclerosis; Albright hereditary osteodystrophy;
KW primer; PCR; ss.
XX
XX Homo sapiens.
OS
PN WO200259313-A2.
XX
PD 01-AUG-2002.
XX
XX 18-DEC-2001; 2001WO-US049394.
XX
PR 18-DEC-2000; 2000US-0256635P.
PR 21-DEC-2000; 2000US-0257878P.
PR 04-JAN-2001; 2001US-0259743P.
PR 10-JAN-2001; 2001US-0260718P.
PR 12-JAN-2001; 2001US-0261498P.
PR 24-JAN-2001; 2001US-0263689P.
PR 08-FEB-2001; 2001US-0267464P.
PR 22-FEB-2001; 2001US-0271021P.
PR 14-MAR-2001; 2001US-0275946P.
PR 23-MAR-2001; 2001US-0278150P.
PR 18-APR-2001; 2001US-0284591P.
PR 23-APR-2001; 2001US-0285718P.
PR 19-JUN-2001; 2001US-0299327P.
PR 16-AUG-2001; 2001US-0312902P.
XX
PA (CURA-) CURAGEN CORP.
XX
XX Li L, Ballinger RA, Padigaru M, Kekuda R, Colman SD, Spytek KA;
PI Casman SJ, Vernet CAM, Shenoy SG, Gusev V, Malyankar UM, Edinger S;
PI Gerlach V, Smithson G, Stone DJ, Sciore P, Macdougall JR, Gunther E;
PI Peyman JA, Ellerman K, Gangolli EA, Millet I;
XX WPI; 2002-599789/64.
XX
XX New G protein coupled receptor polypeptides and polynucleotides, useful
PT in gene therapy, particularly for treating or preventing cardiomyopathy,
PT atherosclerosis, diabetes, multiple sclerosis, Crohn's disease or cancer
PT in humans.
XX
XX Claim 9; Page 467; 685pp; English.
XX
XX The invention relates to novel isolated G-protein coupled receptor (GPCR)
CC polypeptides and polynucleotides. The GPCR polypeptide, GPCR nucleic acid
CC and antibody are useful for treating, preventing or alleviating a GPCR-
CC associated disorder or a pathological state in a subject, particularly a
CC human. In particular, the disorder is cardiomyopathy, atherosclerosis,
CC diabetes, or a disorder related to cell signal processing and metabolic
CC pathway modulation. The GPCR polypeptide and nucleic acid are also useful
CC for diagnosing the presence of or predisposition to a disease associated
CC with altered levels of GPCR, particularly cancer. The GPCR nucleic acid
CC and polypeptide are especially useful in therapeutic or prophylactic
CC applications for disorders associated with aberrant GPCR expression or
CC activity. The DNA encoding the protein is useful in gene therapy for
CC treating the above conditions. Furthermore, the nucleic acids and
CC polypeptides are useful in treating adenocarcinoma, lymphoma, prostate
CC cancer, uterus cancer, immune response, neurodegenerative disorders,
CC asthma, inflammatory disorders, Crohn's disease, multiple sclerosis or

CC Albright hereditary osteodystrophy. These are also useful in developing a
CC powerful assay system for functional analysis of various human disorders,
CC as well as in diagnostic applications. ABS58747-ABS59231 represent human
CC GPCR coding sequences, primers and probes of the invention
XX
XX Sequence 22 BP; 3 A; 6 C; 4 G; 9 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.6; DB 1; Length 22;
Best Local Similarity 81.8%; Pred. No. 4.4e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 820 GAGAGTCCCTCACCCTGTCT 841
DB 1 GGAAGTTCCTTACCCTTTCT 22
RESULT 215
AAQ37360
ID AAQ37360 standard; DNA; 23 BP.
XX
XX AAQ37360;
XX
XX 25-MAR-2003 (revised)
DT 20-JUN-1993 (first entry)
XX
XX Probe for Streptococcus agalactiae 16S rRNA gene fragments.
DE
XX Bacterium; cerebrospinal fluid; CSF; 16S rRNA; meningitis; ss.
KW
XX Synthetic.
OS
XX WO9303186-A1.
PN
XX 18-FEB-1993.
PD
XX 31-JUL-1992; 92WO-US006365.
PF
XX 31-JUL-1991; 91US-00738393.
PR
XX (HOFF) HOFFMANN LA ROCHE INC.
PA
XX Greisen KS, Leong DU;
PI
XX WPI; 1993-076541/09.
XX
XX Detecting bacteria causing meningitis in cerebrospinal fluid - by
PT amplifying target regions and detecting using panel of probes which
PT includes universal bacterial probe.
XX
XX Example 5; Page 29; 65pp; English.
PS
XX A series of synthetic probes were tested for their ability to hybridise
CC to specific bacterial species in the CSF. For the detection of
CC Streptococcus agalactiae probe VP109 lacking 2 bases from the 5' end
CC gives an improved detection rate. See also AAQ37314-59. (Updated on 25-
CC MAR-2003 to correct FN field.)
XX
XX Sequence 23 BP; 8 A; 2 C; 6 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.6; DB 1; Length 23;
Best Local Similarity 81.8%; Pred. No. 4.6e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 585 AFTCAGATTGGCTTGGAAA 606
DB 1 AACTGAGATTGGCTTTAAGA 22
RESULT 216
AAQ37359/c
ID AAQ37359 standard; DNA; 23 BP.
XX
XX AAQ37359;
AC

XX 25-MAR-2003 (revised)
 DT 20-JUN-1993 (first entry)
 XX
 DE Probe for Streptococcus agalactiae 16S rRNA gene fragments.
 XX
 KW Bacterium; cerebrospinal fluid; CSF; 16S rRNA; meningitis; ss.
 XX
 OS Synthetic.
 XX
 PN W9303186-A1.
 XX
 PD 18-FEB-1993.
 XX
 PF 31-JUL-1992; 92MO-US006365.
 XX
 PR 31-JUL-1991; 91US-00738393.
 XX
 PA (HOFF) HOFFMANN LA ROCHE INC.
 XX
 PI Greisen KS, Leong DU;
 XX
 XX WPI; 1993-076541/09.
 DR
 XX Detecting bacteria causing meningitis in cerebrospinal fluid - by
 PT amplifying target regions and detecting using panel of probes which
 PT includes universal bacterial probe.
 XX
 XX Example 5; Page 29; 65pp; English.
 XX
 CC A series of synthetic probes were tested for their ability to hybridise
 CC to specific bacterial species in the CSF. For the detection of
 CC Streptococcus agalactiae probe KG0001 lacking 2 bases from the 5' end
 CC gives an improved detection rate. See also AAK37314-60. (Updated on 25-
 CC MAR-2003 to correct PN field.)
 XX
 SQ Sequence 23 BP; 7 A; 6 C; 2 G; 8 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.6; DB 1; Length 23;
 Best Local Similarity 81.8%; Pred. No. 4.6e+02;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 585 ATCTGAGATTGGTTGGGAAA 606
 Db 23 AACTGAGATTGGTTTAAAGAGA 2
 RESULT 217
 AAX02161
 ID AAX02161 standard; DNA; 23 BP.
 XX
 AC AAX02161;
 XX
 DT 23-APR-1999 (first entry)
 XX
 DE Human IVS17 3'-acceptor splice site PCR primer #9.
 XX
 KW IVS17 acceptor splice site; PCR primer; detection; base-pair mutation;
 KW heteroduplex; homoduplex; migration; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN US5874212-A.
 XX
 PD 23-FEB-1999.
 XX
 PF 06-JUN-1995; 95US-00468551.
 XX
 PR 13-MAY-1993; 93US-000061574.
 XX
 PA (UYJE-) UNIV JEFFERSON THOMAS.
 XX

PI Ganguly A, Rock MJ, Prockop DJ;
 XX
 DR WPI; 1999-179967/15.
 XX
 DE Detection of nucleic acid mutations - by electrophoresis in
 PT polyacrylamide gel that distinguishes heteroduplexes from homoduplexes.
 PT
 XX
 XX Disclosure; Col 5; 16pp; English.
 PS
 CC AAX02153-X02161 are primers used in a method for detecting one or more
 CC base-pair mutations in a nucleic acid sequence by differentiating
 CC heteroduplexes from homoduplexes. The method involves generating
 CC homoduplexes and heteroduplexes in a sample and performing gel
 CC electrophoresis on the sample using a polyacrylamide gel that causes
 CC heteroduplexes to migrate more slowly than homoduplexes. The gel
 CC comprises 3-20% polyacrylamide, 1-50% of at least one denaturing agent
 CC selected from aliphatic alcohols, cyclic alcohols, alicyclic compounds,
 CC amides, ureas and carbamates, 10-100 mM borate-free TE [Tris-HCl, EDTA]
 CC buffer, and 10-100 mM taurine. The method has a high reliability and can
 CC be improved by allowing for the presence of the mutations in domains with
 CC high melting temperatures. These primers can specifically detect a
 CC mutation in the human IVS17 3'-acceptor splice site
 XX
 SQ Sequence 23 BP; 8 A; 7 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.6; DB 1; Length 23;
 Best Local Similarity 81.8%; Pred. No. 4.6e+02;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 36 GTAGCAGGAGCACCAGCAGTG 57
 Db 1 GAAGCCAGGAGCACCAGCAATG 22
 RESULT 218
 AAX40717
 ID AAX40717 standard; DNA; 24 BP.
 XX
 AC AAX40717;
 XX
 DT 14-AUG-2001 (first entry)
 XX
 DE SNP specific upper PCR primer SEQ ID 3513.
 XX
 KW Single nucleotide polymorphism; SNP; single nucleotide primer extension;
 KW SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer;
 KW Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;
 KW polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;
 KW acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;
 KW inflammation; forensic investigation; paternity analysis; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200129262-A2.
 XX
 DT 26-APR-2001.
 XX
 DE 13-OCT-2000; 2000WO-US028436.
 XX
 PR 15-OCT-1999; 99US-0160096P.
 XX
 PA (ORCH-) ORCHID BIOSCIENCES INC.
 XX
 PI Picoult-Newburg L, Pohl M;
 XX
 DR WPI; 2001-290930/30.
 XX
 DE New genotyping oligonucleotide, useful for detecting the presence,
 PT absence or identity of single polynucleotide polymorphism in a nucleic
 PT acid sample.
 XX
 PS Claim 1; Page 67; 83pp; English.
 XX

CC Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide
CC primer extension (SNPE) primers, and the sequences of regions flanking
CC sites of single nucleotide polymorphisms SNPs. The present invention
CC includes kits for determining the presence or absence of a SNP, using the
CC oligonucleotides of the invention. The PCR primers are used to amplify a
CC SNP flanking sequence, the SNPE primer is used as a genotyping primer.
CC The oligonucleotides are useful for genotyping a nucleic acid sample by
CC performing a single-nucleotide primer extension reaction. The
CC oligonucleotides are useful for determining the presence, absence or
CC identity of a SNP and for genotyping nucleic acid samples, for e.g. to
CC assess by association analysis the genotype of an individual or group of
CC individuals, having a pathological phenotypic trait suspected of being
CC caused by one or more SNPs. Phenotypic traits include diseases e.g.
CC agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
CC dystrophy, familial hypercholesterolaemia, polycystic kidney disease,
CC osteogenesis imperfecta and acute intermittent porphyria. Phenotypic
CC traits also include symptoms of or susceptibility to multifactorial
CC disease of which a component is or may be genetic such as autoimmune
CC diseases, including, rheumatoid arthritis, multiple sclerosis,
CC inflammation, cancer, nervous system diseases and infection by pathogenic
CC microorganism. The method is also useful in forensic investigations and
CC paternity analysis. The present sequence represents a PCR primer specific
CC for a human SNP containing DNA sequence
XX
SQ Sequence 24 BP; 10 A; 9 C; 2 G; 3 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.6; DB 1; Length 24;
Best Local Similarity 81.8%; Pred. No. 4.8e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1310 AGACATACAACTACCCCAAGTA 1331
Db 3 ACACACACATCTACCCCAAGGA 24
RESULT 219
ID ABS54362/c
XX ABS54362 standard; DNA; 24 BP.
AC ABS54362;
XX
DT 23-DEC-2002 (first entry)
XX
DE Mucor circinelloides PKAC, primer pkaCrev.
XX
KW Morphology regulator; dimorphic fungal cell; fungal host organism;
KW recombinant protein expression; growth; low viscosity; protein secretion;
KW filamentous fungus; PKAC; primer; ss;
KW CAMP-dependent protein kinase A catalytic subunit.
XX
OS Mucor circinelloides.
XX
PN WO200270721-A2.
XX
PD 12-SEP-2002.
XX
PF 08-MAR-2002; 2002WO-DK000157.
XX
PR 08-MAR-2001; 2001DK-00000395.
XX
PR 12-MAR-2001; 2001US-0274650P.
XX
PA (BIOT-) BIOTEKNOLOGISK INST.
XX
PI Wolff AM, Appel KF, Petersen JB, Poulsen U, Arnau J, Jacobsen MD;
XX
DR WPI; 2002-723266/78.
XX
PT New isolated polynucleotide encoding at least one regulator of morphology
PT capable of regulating the morphology of a dimorphic fungal cell, useful
PT for producing and/or secreting large quantities of commercially valuable
PT proteins.
XX
PS Example 2; Page 120; 296pp; English.

XX The present invention relates to the isolation of polynucleotide
CC sequences encoding at least one regulator of morphology and capable of
CC regulating the morphology of a dimorphic fungal cell, and operably linked
CC to a nucleotide sequence comprising an expression signal capable of
CC directing the expression of the first sequence in a dimorphic fungal
CC cell, where the sequences are not natively associated. The invention
CC provides fungal host organisms capable of expressing recombinant proteins
CC while at the same time exhibiting homogeneous growth and low viscosity
CC characteristics. The fungal host organism has the capability for high
CC protein secretion normally associated with filamentous fungi. The
CC dimorphic fungal cells are useful for increasing production and/or
CC secretion of large quantities of commercially valuable proteins. The
CC present sequence represents a primer used in the examples of the present
CC invention
XX
SQ Sequence 24 BP; 2 A; 3 C; 2 G; 7 T; 0 U; 10 Other;
Query Match 0.9%; Score 15.6; DB 1; Length 24;
Best Local Similarity 52.2%; Pred. No. 4.8e+02;
Matches 12; Conservative 7; Mismatches 4; Indels 0; Gaps 0;
QY 974 ACCGAGACCTCAAGCCCAAGAAC 996
Db 23 AYMGNAGYVTTNARCNGARAAY 1
RESULT 220
ID ABK90912/c
XX ABK90912 standard; DNA; 24 BP.
AC ABK90912;
XX
DT 05-NOV-2002 (first entry)
XX
DE Fruit fly LRR47 polypeptide 47-33.88, RT-PCR primer 1.
XX
KW Fruit fly; LRR47 polypeptide 47-33.88; embryonic development deformity;
KW tumour; diabetes; menstrual disorder; peptide ulcer; arrhythmia; anaemia;
KW epilepsy; reverse transcriptase PCR; RT-PCR; primer; ss.
XX
OS Drosophila sp.
XX
PN CN1341640-A.
XX
PD 27-MAR-2002.
XX
PF 05-SEP-2000; 2000CN-00125025.
XX
PR 05-SEP-2000; 2000CN-00125025.
XX
PA (SHAN-) SHANGHAI BIODOOR GENE DEV CO LTD.
XX
PI Mao Y, Xie Y;
XX
DR WPI; 2002-520716/56.
XX
PT A fruit fly LRR47 polypeptide 47-33.88, useful for curing e.g. tumours and
PT diabetes.
XX
PS Example 3; Page 18 (Disclosure); 33pp; Chinese.
XX
CC The present invention relates to a new fruit fly LRR47 polypeptide 47-
CC 33.88. The polypeptide is useful for curing several diseases, such as
CC embryonic development deformity, tumour, diabetes, menstrual disorder,
CC peptide ulcer, arrhythmia, anaemia and epilepsy. The present nucleic acid
CC sequence represents a reverse transcriptase (RT)-PCR primer that was used
CC in the methods of the invention to isolate the coding sequence of the
CC fruit fly LRR47 polypeptide 47-33.88
XX
SQ Sequence 24 BP; 1 A; 8 C; 13 G; 2 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.6; DB 1; Length 24;

```
Best Local Similarity 81.8%; Pred. No. 4.8e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 732 GGCACCCCTGCACCGCCATCCGG 753
DB 23 GCCACCCGGCGCCCATCGGG 2

RESULT 221
ABQ10087
ID ABQ10087 standard; DNA; 24 BP.
AC ABQ10087;
XX
XX
XX 11-JUN-2002 (first entry)
DT
DE Oligonucleotide adapter/capture probe 10078.
XX
XX Oligonucleotide array; adapter sequence; probe; ss.
XX
XX Synthetic.
XX
XX WO200216649-A2.
XX
XX 28-FEB-2002.
XX
XX 27-AUG-2001; 2001WO-US026519.
XX
XX 25-AUG-2000; 2000US-0227948P.
XX
XX 29-AUG-2000; 2000US-0228854P.
XX
XX (ILLU-) ILLUMINA INC.
XX
XX Gunderson K;
XX
XX WPI; 2002-292068/33.
XX
XX Array comprising adapter sequences useful for immobilizing or detecting a
XX target nucleic acid sequence, has different addresses comprising
XX different specific capture probes.
XX
XX Claim 1; Page 213; 261pp; English.
XX
XX The invention relates to an oligonucleotide array (I) comprising at least
XX 25 different addresses (adapter sequences) with each comprising a
XX different capture probe selected from a group consisting of the sequences
XX given in ABQ00010-ABQ13409. (I) is useful for immobilising a target
XX nucleic acid sequence by attaching a adapter nucleic acid (ABQ00010-
XX ABQ13409) to a target nucleic acid to form a modified target nucleic acid
XX and contacting the modified target nucleic acid with (I). The steps of
XX above method is useful for detecting a target nucleic acid, which further
XX comprises detecting the presence of the modified target nucleic acid
XX
XX Sequence 24 BP; 4 A; 4 C; 9 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.6; DB 1; Length 24;
XX Best Local Similarity 81.8%; Pred. No. 4.8e+02;
XX Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX Claim 1; Page 213; 261pp; English.
XX
XX The invention relates to an oligonucleotide array (I) comprising at least
XX 25 different addresses (adapter sequences) with each comprising a
XX different capture probe selected from a group consisting of the sequences
XX given in ABQ00010-ABQ13409. (I) is useful for immobilising a target
XX nucleic acid sequence by attaching a adapter nucleic acid (ABQ00010-
XX ABQ13409) to a target nucleic acid to form a modified target nucleic acid
XX and contacting the modified target nucleic acid with (I). The steps of
XX above method is useful for detecting a target nucleic acid, which further
XX comprises detecting the presence of the modified target nucleic acid
XX
XX Sequence 24 BP; 7 A; 9 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.6; DB 1; Length 24;
XX Best Local Similarity 81.8%; Pred. No. 4.8e+02;
XX Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX 542 TCTTTGACAGCCCTCAGCCG 563
XX 3 TCCTGGACAAGACCCCTCAACCG 24

RESULT 222
ABQ10128/C
ID ABQ10128 standard; DNA; 24 BP.
XX
XX ABQ10128;
XX
XX 11-JUN-2002 (first entry)
DT
DE Oligonucleotide adapter/capture probe 10119.
XX
XX Oligonucleotide array; adapter sequence; probe; ss.
XX
XX Synthetic.
XX
XX WO200216649-A2.
XX
XX 28-FEB-2002.
XX
XX 27-AUG-2001; 2001WO-US026519.
XX
XX 25-AUG-2000; 2000US-0227948P.
XX
XX 29-AUG-2000; 2000US-0228854P.
XX
XX (ILLU-) ILLUMINA INC.
XX
XX Gunderson K;
XX
XX WPI; 2002-292068/33.
XX
XX Array comprising adapter sequences useful for immobilizing or detecting a
XX target nucleic acid sequence, has different addresses comprising
XX different specific capture probes.
XX
XX Claim 1; Page 213; 261pp; English.
XX
XX The invention relates to an oligonucleotide array (I) comprising at least
XX 25 different addresses (adapter sequences) with each comprising a
XX different capture probe selected from a group consisting of the sequences
XX given in ABQ00010-ABQ13409. (I) is useful for immobilising a target
XX nucleic acid sequence by attaching a adapter nucleic acid (ABQ00010-
XX ABQ13409) to a target nucleic acid to form a modified target nucleic acid
XX and contacting the modified target nucleic acid with (I). The steps of
XX above method is useful for detecting a target nucleic acid, which further
XX comprises detecting the presence of the modified target nucleic acid
XX
XX Sequence 24 BP; 4 A; 4 C; 9 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.6; DB 1; Length 24;
XX Best Local Similarity 81.8%; Pred. No. 4.8e+02;
XX Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX 542 TCTTTGACAGCCCTCAGCCG 563
XX 22 TCCTGGACAAGACCCCTCAACCG 1

RESULT 223
ABQ03115
ID ABQ03115 standard; DNA; 24 BP.
XX
XX ABQ03115;
XX
XX 11-JUN-2002 (first entry)
DT
DE Oligonucleotide adapter/capture probe 3106.
XX
XX Oligonucleotide array; adapter sequence; probe; ss.
XX
XX Synthetic.
XX
XX WO200216649-A2.
XX
XX 28-FEB-2002.
XX
XX 27-AUG-2001; 2001WO-US026519.
XX
XX 25-AUG-2000; 2000US-0227948P.
XX
XX 29-AUG-2000; 2000US-0228854P.
XX
XX (ILLU-) ILLUMINA INC.
XX
XX Gunderson K;
XX
```

XX WPI; 2002-292068/33.
XX
XX Array comprising adapter sequences useful for immobilizing or detecting a
PT target nucleic acid sequence, has different addresses comprising
PT different specific capture probes.
XX
XX Claim 1; Page 118; 261pp; English.
XX
XX The invention relates to an oligonucleotide array (I) comprising at least
CC 25 different addresses (adapter sequences) with each comprising a
CC different capture probe selected from a group consisting of the sequences
CC given in ABQ0010-ABQ13409. (I) is useful for immobilising a target
CC nucleic acid sequence by attaching a adapter nucleic acid (ABQ0010-
CC ABQ13409) to a target nucleic acid to form a modified target nucleic acid
CC and contacting the modified target nucleic acid with (I). The steps of
CC above method is useful for detecting a target nucleic acid, which further
CC comprises detecting the presence of the modified target nucleic acid
XX
SQ Sequence 24 BP; 7 A; 9 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.6; DB 1; Length 24;
Best Local Similarity 81.8%; Pred. No. 4.8e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 542 TCTTGCACAGCCCTCAACG 563
DB 3 TCCTGGACAGACCTCAACG 24
RESULT 224
ABI84591
ID ABI84591 standard; DNA; 24 BP.
XX
XX AC ABI84591;
XX
XX 15-FEB-2002 (first entry)
XX
XX Capture oligonucleotide Zip ID#1097 oligo #2.
XX
XX Human; K-ras; PCR primer; probe; capture probe; mutation detection;
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
KW oncogene; tumour suppressor; human papillomavirus; forensic;
KW environmental monitoring; food industry; feed industry; ss.
XX
XX Synthetic.
XX
XX WO200179548-A2.
XX
XX 25-OCT-2001.
XX
XX 04-APR-2001; 2001WO-US010958.
XX
XX 14-APR-2000; 2000US-0197271P.
XX
XX (CORR) CORNELL RES FOUND INC.
XX
XX Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
XX
XX WPI; 2002-034366/04.
XX
XX Designing capture oligonucleotide probes for use on a support to which
PT complementary oligonucleotides hybridize with little mismatch.
XX
XX Example 5; Fig 25; 300pp; English.
XX
XX The present invention describes a method (M1) for designing capture
CC oligonucleotide probes (I) for use on a support to which complementary
CC oligonucleotide probes (II) will hybridise with little mismatch, where
CC (I) have melting temperatures within a narrow range. The method is useful
CC for detecting infectious diseases caused by bacterial infectious agents
CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal

CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and
CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
CC Epstein-Barr virus and polio virus, and parasitic infectious agents
CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
CC medinis. The method is also useful for detecting genetic diseases such
CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes
CC involved in DNA amplification, replication, recombination or repair, the
CC cancer is specifically associated with a gene selected from BRCA1 gene,
CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
CC method is also used for environmental monitoring, forensics and the food
CC and feed industry, detecting comprises scanning (using e.g. a scanning
CC electron microscope and infrared microscope) the support at the
CC particular sites and identifying if ligation of the oligonucleotide probe
CC sets occurred and correlating (using a computer) identified ligation to a
CC presence or absence of the target nucleotide sequences. ABI82074 to
CC ABI97546 represent oligonucleotide sequences used in the exemplification
CC of the present invention
XX
SQ Sequence 24 BP; 4 A; 9 C; 6 G; 5 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.6; DB 1; Length 24;
Best Local Similarity 81.8%; Pred. No. 4.8e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1279 TGCCAGGACATCTGTCCAACG 1300
DB 3 TGCCGTGACATCTGTCCAACG 24
RESULT 225
ABI82867
ID ABI82867 standard; DNA; 24 BP.
XX
XX AC ABI82867;
XX
XX 15-FEB-2002 (first entry)
XX
XX Capture oligonucleotide Zip ID#235 oligo #2.
XX
XX Human; K-ras; PCR primer; probe; capture probe; mutation detection;
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
KW oncogene; tumour suppressor; human papillomavirus; forensic;
KW environmental monitoring; food industry; feed industry; ss.
XX
XX Synthetic.
XX
XX WO200179548-A2.
XX
XX 25-OCT-2001.
XX
XX 04-APR-2001; 2001WO-US010958.
XX
XX 14-APR-2000; 2000US-0197271P.
XX
XX (CORR) CORNELL RES FOUND INC.
XX
XX Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
XX
XX WPI; 2002-034366/04.
XX
XX Designing capture oligonucleotide probes for use on a support to which
PT complementary oligonucleotides hybridize with little mismatch.
XX
XX Example 5; Fig 25; 300pp; English.
XX
XX The present invention describes a method (M1) for designing capture
CC oligonucleotide probes (I) for use on a support to which complementary
CC oligonucleotide probes (II) will hybridise with little mismatch, where
CC (I) have melting temperatures within a narrow range. The method is useful
CC for detecting infectious diseases caused by bacterial infectious agents
CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal

CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and
 CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
 CC Epstein-Barr virus and polio virus, and parasitic infectious agents
 CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
 CC medinensis. The method is also useful for detecting genetic diseases such
 CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
 CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes
 CC involved in DNA amplification, replication, recombination or repair, the
 CC cancer is specifically associated with a gene selected from BRCA1 gene,
 CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
 CC method is also used for environmental monitoring, forensics and the food
 CC and feed industry, detecting comprises scanning (using e.g. a scanning
 CC electron microscope and infrared microscope) the support at the
 CC particular sites and identifying if ligation of the oligonucleotide probe
 CC sets occurred and correlating (using a computer) identified ligation to a
 CC presence or absence of the target nucleotide sequences. ABI82074 to
 CC AB197546 represent oligonucleotide sequences used in the exemplification
 CC of the present invention
 XX
 SQ Sequence 24 BP; 3 A; 6 C; 8 G; 7 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.6; DB 1; Length 24;
 Best Local Similarity 81.8%; Pred. No. 4.8e+02;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1118 TCCTGCTGGTCCACGGACTA 1139
 |||||
 Db 3 TCCTGCTGGTCCATGGACA 24

RESULT 226
 ABI92132/C
 ID ABI92132 standard; DNA; 24 BP.
 XX
 AC ABI92132;
 XX
 DT 15-FEB-2002 (first entry)
 DE Capture oligonucleotide zip ID#235 oligo #3.
 DE Human; K-ras; PCR primer; probe; capture probe; mutation detection;
 KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
 KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
 KW oncogene; tumour suppressor; human papillomavirus; forensic;
 KW environmental monitoring; food industry; feed industry; ss.
 XX
 OS Synthetic.
 XX
 PN WO200179548-A2.
 XX
 PD 25-OCT-2001.
 XX
 PF 04-APR-2001; 2001WO-US010958.
 XX
 PR 14-APR-2000; 2000US-0197271P.
 XX
 PA (CORR) CORNELL RES FOUND INC.
 XX
 PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
 XX
 DR WPI; 2002-034366/04.
 XX
 PT Designing capture oligonucleotide probes for use on a support to which
 PT complementary oligonucleotides hybridize with little mismatch.
 XX
 PS Claim 3; Fig 26; 300pp; English.

CC The present invention describes a method (M1) for designing capture
 CC oligonucleotide probes (I) for use on a support to which complementary
 CC oligonucleotide probes (II) will hybridize with little mismatch where
 CC (I) have melting temperatures within a narrow range. The method is useful
 CC for detecting infectious diseases caused by bacterial infectious agents
 CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal

CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and
 CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
 CC Epstein-Barr virus and polio virus, and parasitic infectious agents
 CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
 CC medinensis. The method is also useful for detecting genetic diseases such
 CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
 CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes
 CC involved in DNA amplification, replication, recombination or repair, the
 CC cancer is specifically associated with a gene selected from BRCA1 gene,
 CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
 CC method is also used for environmental monitoring, forensics and the food
 CC and feed industry, detecting comprises scanning (using e.g. a scanning
 CC electron microscope and infrared microscope) the support at the
 CC particular sites and identifying if ligation of the oligonucleotide probe
 CC sets occurred and correlating (using a computer) identified ligation to a
 CC presence or absence of the target nucleotide sequences. ABI82074 to
 CC AB197546 represent oligonucleotide sequences used in the exemplification
 CC of the present invention
 XX
 SQ Sequence 24 BP; 7 A; 8 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.6; DB 1; Length 24;
 Best Local Similarity 81.8%; Pred. No. 4.8e+02;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1118 TCCTGCTGGTCCACGGACTA 1139
 |||||
 Db 22 TCCTGCTGGTCCATGGACA 1

RESULT 227
 ABI92133
 ID ABI92133 standard; DNA; 24 BP.
 XX
 AC ABI92133;
 XX
 DT 15-FEB-2002 (first entry)
 DE Capture oligonucleotide zip ID#235 oligo #4.
 DE Human; K-ras; PCR primer; probe; capture probe; mutation detection;
 KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
 KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
 KW oncogene; tumour suppressor; human papillomavirus; forensic;
 KW environmental monitoring; food industry; feed industry; ss.
 XX
 OS Synthetic.
 XX
 PN WO200179548-A2.
 XX
 PD 25-OCT-2001.
 XX
 PF 04-APR-2001; 2001WO-US010958.
 XX
 PR 14-APR-2000; 2000US-0197271P.
 XX
 PA (CORR) CORNELL RES FOUND INC.
 XX
 PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
 XX
 DR WPI; 2002-034366/04.
 XX
 PT Designing capture oligonucleotide probes for use on a support to which
 PT complementary oligonucleotides hybridize with little mismatch.
 XX
 PS Claim 3; Fig 26; 300pp; English.

CC The present invention describes a method (M1) for designing capture
 CC oligonucleotide probes (I) for use on a support to which complementary
 CC oligonucleotide probes (II) will hybridize with little mismatch where
 CC (I) have melting temperatures within a narrow range. The method is useful
 CC for detecting infectious diseases caused by bacterial infectious agents
 CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal

CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and
CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
CC Epstein-Barr virus and polio virus, and parasitic infectious agents
CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
CC medinensis. The method is also useful for detecting genetic diseases such
CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes
CC involved in DNA amplification, replication, recombination or repair, the
CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
CC method is also used for environmental monitoring, forensics and the food
CC and feed industry, detecting comprises scanning (using e.g. a scanning
CC electron microscope and infrared microscope) the support at the
CC particular sites and identifying if ligation of the oligonucleotide probe
CC sets occurred and correlating (using a computer) identified ligation to a
CC presence or absence of the target nucleotide sequences. ABI82074 to
CC ABI97546 represent oligonucleotide sequences used in the exemplification
CC of the present invention
XX
SQ Sequence 24 BP; 3 A; 6 C; 8 G; 7 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.6; DB 1; Length 24;
Best Local Similarity 81.8%; Pred. No. 4.8e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1118 TCCTGCTTGGTCCAGGACTA 1139
DB 3 TCTTGCTTGGTCCATGGACGA 24

RESULT 228
ABI82866/C
ID ABI82866 standard; DNA; 24 BP.
AC ABI82866;
XX
DT 15-FEB-2002 (first entry)
XX
DE Capture oligonucleotide Zip ID#235 oligo #1.
XX
KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
KW oncogene; tumour suppressor; human papillomavirus; forensic;
KW environmental monitoring; food industry; feed industry; ss.
XX
OS Synthetic.
XX
PN WO200179548-A2.
XX
PD 25-OCT-2001.
XX
PF 04-APR-2001; 2001WO-US010959.
XX
PR 14-APR-2000; 2000US-0197271P.
XX
PA (CORR) CORNELL RES FOUND INC.
XX
PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
XX
PI WPI; 2002-034366/04.
XX
DR Designing capture oligonucleotide probes for use on a support to which
PT complementary oligonucleotides hybridize with little mismatch.
XX
PS Example 5; Fig 25; 300pp; English.

XX The present invention describes a method (M1) for designing capture
CC oligonucleotide probes (I) for use on a support to which complementary
CC oligonucleotide probes (II) will hybridise with little mismatch, where
CC (I) have melting temperatures within a narrow range. The method is useful
CC for detecting infectious diseases caused by bacterial infectious agents
CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal

CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and
CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
CC Epstein-Barr virus and polio virus, and parasitic infectious agents
CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
CC medinensis. The method is also useful for detecting genetic diseases such
CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes
CC involved in DNA amplification, replication, recombination or repair, the
CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
CC method is also used for environmental monitoring, forensics and the food
CC and feed industry, detecting comprises scanning (using e.g. a scanning
CC electron microscope and infrared microscope) the support at the
CC particular sites and identifying if ligation of the oligonucleotide probe
CC sets occurred and correlating (using a computer) identified ligation to a
CC presence or absence of the target nucleotide sequences. ABI82074 to
CC ABI97546 represent oligonucleotide sequences used in the exemplification
CC of the present invention
XX
SQ Sequence 24 BP; 7 A; 8 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.6; DB 1; Length 24;
Best Local Similarity 81.8%; Pred. No. 4.8e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1118 TCCTGCTTGGTCCAGGACTA 1139
DB 22 TCTTGCTTGGTCCATGGACGA 1

RESULT 229
ABI84590/C
ID ABI84590 standard; DNA; 24 BP.
XX
AC ABI84590;
XX
DT 15-FEB-2002 (first entry)
XX
DE Capture oligonucleotide Zip ID#1097 oligo #1.
XX
KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
KW oncogene; tumour suppressor; human papillomavirus; forensic;
KW environmental monitoring; food industry; feed industry; ss.
XX
OS Synthetic.
XX
PN WO200179548-A2.
XX
PD 25-OCT-2001.
XX
PF 04-APR-2001; 2001WO-US010958.
XX
PR 14-APR-2000; 2000US-0197271P.
XX
PA (CORR) CORNELL RES FOUND INC.
XX
PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
XX
PI WPI; 2002-034366/04.
XX
DR Designing capture oligonucleotide probes for use on a support to which
PT complementary oligonucleotides hybridize with little mismatch.
XX
PS Example 5; Fig 25; 300pp; English.

XX The present invention describes a method (M1) for designing capture
CC oligonucleotide probes (I) for use on a support to which complementary
CC oligonucleotide probes (II) will hybridise with little mismatch, where
CC (I) have melting temperatures within a narrow range. The method is useful
CC for detecting infectious diseases caused by bacterial infectious agents
CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal

CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and
 CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
 CC Epstein-Barr virus and polio virus, and parasitic infectious agents
 CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
 CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
 CC detecting cancer involving oncogenes, tumour suppressor genes, or genes
 CC involved in DNA amplification, replication, recombination or repair, the
 CC cancer is specifically associated with a gene selected from BRCA1 gene,
 CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
 CC method is also used for environmental monitoring, forensics and the food
 CC and feed industry, detecting comprises scanning (using e.g. a scanning
 CC electron microscope and infrared microscope) the support at the
 CC particular sites and identifying (if ligation of the oligonucleotide probe
 CC sets occurred and correlating (using a computer) identified ligation to a
 CC presence or absence of the target nucleotide sequences. AB182074 to
 CC AB197546 represent oligonucleotide sequences used in the exemplification
 CC of the present invention
 XX
 SQ Sequence 24 BP; 5 A; 6 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.6; DB 1; Length 24;
 Best Local Similarity 81.8%; Pred. No. 4.8e+02;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1279 TGGCCAGGCGATCTGTCCAAG 1300
 |||||
 DB 22 TGCCGTGACATCCGTCCAAG 1

RESULT 230

ABK19257
 ID ABK19257 standard; RNA; 17 BP.

AC ABK19257;

XX 09-APR-2002 (first entry)

DE Human ERG Amberzyme target sequence Seq ID No 1904.

XX Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
 KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
 KW vulnary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
 KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
 KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
 KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
 KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
 KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
 KW amberzyme.

XX Homo sapiens.

XX WO200188124-A2.

XX 22-NOV-2001.

XX 16-MAY-2001; 2001WO-US015866.

XX 16-MAY-2000; 2000US-00572021.

XX (RIBO-) RIBOZYME PHARM INC.

XX (GLAXO) GLAXO GROUP LTD.

XX Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;

XX WPI; 2002-082395/11.

XX Novel polynucleotide which down regulates expression of Ets-related gene,
 PT useful for treating cancer, diabetic retinopathy, macular degeneration,
 PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.

XX Claim 4; Page 124; 149pp; English.

CC The invention relates to a nucleic acid molecule (I) which down regulates
 CC expression of an Ets-related gene (ERG). (I) is useful for treating
 CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
 CC tumour angiogenesis, diabetic retinopathy, macular degeneration,
 CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
 CC vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
 CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
 CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
 CC treating a patient having a condition associated with the level of ERG,
 CC by contacting cells of the patient with (I) under conditions suitable for
 CC the treatment. The method comprises the use of one or more therapies
 CC under conditions suitable for the treatment. Leukaemia or tumour
 CC angiogenesis is treated by administering (I) to the patient in
 CC conjunction with one or more of other therapies such as radiation or
 CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
 CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
 CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
 CC cation such as Mg²⁺. (I) is useful for diagnosis of conditions and
 CC diseases related to the expression of ERG, and as diagnostic tool to
 CC examine genetic drift and mutations within diseased cells or to detect
 CC the presence of ERG RNA in a cell. (I) is useful for specifically
 CC targeting genes that share homology with ERG gene or ERG fusion genes.
 CC ABK17354-ABK22719 represent nucleic acids, including antisense and
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and
 CC related PCR primers of the invention
 XX
 SQ Sequence 17 BP; 5 A; 4 C; 6 G; 0 T; 2 U; 0 Other;

Query Match 0.9%; Score 15.4; DB 1; Length 17;

Best Local Similarity 82.4%; Pred. No. 3.6e+02;

Matches 14; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1295 CCAACGAGGAGTTCAG 1311

|||||
 DB 1 CCAACGGGAGUCAG 17

RESULT 231

ABS75018

ID ABS75018 standard; DNA; 17 BP.

AC ABS75018;

XX 24-DEC-2002 (first entry)

XX Human PAPP-Ea associated 17-mer SEQ ID 544.

XX PAPP-E; human; pregnancy associated plasma protein E; abortive;
 KW contraceptive; Gene therapy; vaccine; pregnancy; antenatal; diagnosis;
 KW dysgenetic pregnancy; primer; ss.

XX Homo sapiens.

XX US2002102252-A1.

XX 01-AUG-2002.

XX 06-APR-2001; 2001US-00827998.

XX 26-MAY-2000; 2000US-0207456P.

XX (GUYK/) GU Y.

XX (SHAN/) SHANNON M E.

XX Gu Y, Shannon ME;

XX WPI; 2002-697817/75.

XX New isolated nucleic acid encoding an isoform of human pregnancy
 PT associated plasma protein E, for preventing or aborting pregnancy.

XX Example 2; Page 146; 353pp; English.

CC This invention describes a novel isolated nucleic acid that encodes one
 CC of three new isoforms of human pregnancy associated plasma protein E,
 CC hPAPP-E. The products of the invention have abortive and contraceptive
 CC activity and can be used for gene therapy or in a vaccine. The nucleic
 CC acid, polypeptide encoded by it, or antibody to the polypeptide can be
 CC used in pharmaceutical compositions or vaccines for preventing or
 CC aborting pregnancy. PAPP-E is used in the antenatal diagnosis of
 CC dysgenetic pregnancies. The nucleic acids are used as probes to assess
 CC the level of PAPP-E isoform mRNA in chorionic villus samples, and the
 CC antibodies can be used to assess the expression levels of PAPP-E isoform
 CC proteins in chorionic villus samples, to diagnose dysgenetic pregnancies
 CC antenatally. This sequence represents an oligomer used in scanning the
 CC human PAPP-E genes described in the disclosure of the invention

XX Sequence 17 BP; 4 A; 4 C; 4 G; 5 T; 0 U; 0 Other;
 SQ

Query Match 0.9%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 3.6e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 287 AACTCGTTCTGCACGG 303
 Db 1 AACTCGTTCTGCACGG 17

RESULT 232
 ABK57128
 ID ABK57128 standard; RNA; 17 BP.
 XX
 AC
 XX
 XX
 DT 02-JUL-2002 (first entry)
 DE Human CLCA1 gene enzymatic nucleic acid #1499.
 XX
 KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
 KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
 KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
 KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
 KW acetylcysteine.
 XX
 OS Homo sapiens.
 XX
 FN WO200211674-A2.
 XX
 PD 14-FEB-2002.
 XX
 PF 09-AUG-2001; 2001WO-US024970.
 XX
 PR 09-AUG-2000; 2000US-0224383P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (SYNT) SYNTEX USA LLC.
 PA (THOM) THOMPSON J.
 XX
 PI Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;
 PI Grupe A;
 XX
 WPI; 2002-217145/27.
 XX
 XX Enzymatic polynucleotide that down regulates expression of chloride
 PT channel calcium activated gene, useful for treating Chronic obstructive
 PT pulmonary disease (COPD), chronic bronchitis and asthma.
 PT
 PS Claim 4; Page 96; 152pp; English.
 XX
 XX The invention relates to enzymatic nucleic acid molecules that down
 CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes
 CC by cleaving RNA derived from the genes. The nucleic acid sequences are
 CC useful as pharmaceutical agents for treating conditions such as chronic
 CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
 CC fibrosis, obstructive bowel syndrome and any other diseases or conditions
 CC that are related to or will respond to the levels of CLCA1 in a cell or

CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,
 CC hence, are useful for treatment of a patient having a condition
 CC associated with the level of CLCA1, where the invention further comprises
 CC the use of one or more therapies under conditions suitable for the
 CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
 CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The
 CC nucleic acids of the invention are also used as diagnostic tools to
 CC examine genetic drift and mutations within diseased cells or to detect
 CC the presence of CLCA1 RNA in a cell. This sequence represents an
 CC enzymatic nucleic acid molecule of the invention

XX
 SQ Sequence 17 BP; 4 A; 5 C; 4 G; 0 T; 4 U; 0 Other;
 Query Match 0.9%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 70.6%; Pred. No. 3.6e+02;
 Matches 12; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

QY 1573 TCAGGAGCCGCGCTTT 1589
 Db 1 UCAAGCAGGCCGACUUU 17

RESULT 233
 ACC65856
 ID ACC65856 standard; DNA; 17 BP.
 XX
 AC ACC65856;
 XX
 DT 01-JUL-2003 (first entry)
 DE Murine oligonucleotide associated with tumour suppression, SEQ ID 3103.
 XX
 KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
 KW tumour suppression; tumour reversion; apoptosis; virus resistance;
 KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
 KW schizophrenia; ss.
 XX
 OS Mus musculus.
 XX
 FN WO2003025176-A2.
 XX
 PD 27-MAR-2003.
 XX
 PF 17-SEP-2002; 2002WO-IB004210.
 XX
 PR 17-SEP-2001; 2001FR-00011979.
 XX
 PA (MOLE-) MOLECULAR ENGINES LAB.
 XX
 PI Telerman A, Amson R, Tuijnder M;
 XX
 DR WPI; 2003-333167/31.
 XX
 PT New isolated nucleic acid, useful for treating viral diseases associated
 PT with tumors and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.
 XX
 PS Disclosure; Page 393; 738pp; French.
 XX
 XX The present invention relates to murine oligonucleotides (ACC62754-
 CC ACC68806), which are associated with tumour suppression, tumour
 CC reversion, apoptosis and virus resistance. The oligonucleotides are
 CC useful as (1) as probes and primers for detecting, identifying,
 CC quantifying and/or amplifying nucleic acid, e.g. as one component of a
 CC gene chip; in vitro as (anti)sense reagents; and (2) for production of
 CC recombinant polypeptides. The oligonucleotides are useful for preparation
 CC of pharmaceuticals for prevention and/or treatment of viral diseases that
 CC are characterised by development of tumours or cell degeneration.
 CC Specifically cancer but also Alzheimer's disease and schizophrenia

XX
 SQ Sequence 17 BP; 6 A; 1 C; 7 G; 3 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.4; DB 1; Length 17;

Best Local Similarity 94.1%; Pred. No. 3.6e+02; Mismatches 1; Indels 0; Gaps 0;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 127 GATCGGATGAAGAAGAT 143
Db 1 GATCGGATGAAGAAGAT 17

RESULT 234
AAT12600/C
ID AAT12600 standard; DNA; 19 BP.
XX
AC AAT12600;
XX
DT 31-DEC-1996 (first entry)
XX
DE Human Ty protease cDNA PCR primer Ty 3.2.
XX
KW Interleukin-1 beta converting enzyme; ICE; protease; apoptosis;
KW induction; inflammation; autoimmune disease; neurodegeneration; cancer;
KW infection; treatment; Ty protein; polymerase chain reaction;
KW amplification primer; ss.
XX
OS Synthetic.
XX
XX WO9604387-A1.
XX
PD 15-FEB-1996.
XX
PF 01-AUG-1995; 95WO-FR001035.
XX
PR 02-AUG-1994; 94FR-00009567.
XX
XX (ROUS) ROUSSEL-UCLAF.
XX
PI Diu A, Faucheu C, Hercend T, Lalanne J, Livingston DJ, Su MS;
XX
XX WPI; 1996-129403/13.
XX
DR New DNA encoding human protease(s) that induce apoptosis - and cause
PT maturation of interleukin converting enzyme, useful e.g. in treating
PT autoimmune diseases.
XX
PS Example 3; Page 26; 88pp; French.
XX
XX The present sequence is that of a PCR primer used for isolating the 3'-
CC end of a cDNA sequence coding for the human protease designated Ty which
CC is related to the interleukin-1 beta converting enzyme (ICE) and which
CC induces apoptosis. The Ty protein has over 70% homology to Tx which
CC converts the p30 precursor of ICE into 20 kD and 10 kD fragments and can
CC be used for treating diseases which respond to ICE, e.g. inflammation.
CC The ability to induce apoptosis will be useful for treating cancer
XX
XX Sequence 19 BP; 4 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
SQ

Query Match 0.9%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 4.1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1436 AGGATGCCATGAAACAT 1452
Db 18 AGGATGCCATGAGACAT 2

RESULT 235
AAA82722
ID AAA82722 standard; DNA; 19 BP.
XX
AC AAA82722;
XX
XX 04-DEC-2000 (first entry)
DT
XX cdk3 ribozyme binding site #7.
DE

XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
KW Mammalia.
XX
XX WO2000032765-A2.
XX
XX 08-JUN-2000.
XX
XX 06-DEC-1999; 99WO-US028772.
XX
XX 04-DEC-1998; 98US-0110954P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Tritz R, Welch PJ, Barber JR, Robbins JM;
XX
XX WPI; 2000-412314/35.
XX
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDKL,
PT PCNA and Cyclin B1.
XX
XX Disclosure; Page 50; 109pp; English.
XX
XX The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDKL, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX
XX Sequence 19 BP; 8 A; 2 C; 6 G; 3 T; 0 U; 0 Other;
SQ

Query Match 0.9%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 4.1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 703 AAGGAGATCAGACTGGA 719
Db 2 AAGAAGATCAGACTGGA 18

RESULT 236
AAH57884
ID AAH57884 standard; DNA; 19 BP.
XX
AC AAH57884;
XX
DT 10-SEP-2001 (first entry)
XX
XX Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:308.
DE

XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulvuary;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisticking; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
XX Homo sapiens.
OS
XX Synthetic.
XX
XX WO200130362-A2.
XX
XX 03-MAY-2001.
PD
XX

```
PF 26-OCT-2000; 2000WO-US029500.
XX
XX 26-OCT-1999; 99US-0161532P.
XX (IMMU-) IMMUSOL INC.
XX
XX Robbins JM, Tritz R;
XX WPI; 2001-300427/31.
XX
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
XX Example 1; Page 94; 408pp; English.
XX
XX The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antiproliferative,
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antickling,
CC ophthalmological, vulnerary, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
XX Sequence 19 BP; 8 A; 2 C; 6 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 4.1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 703 AAGAGATCAGACTGGA 719
DB 2 AAGAGATCAGACTGGA 18
|||||
AAGAGATCAGACTGGA 18
RESULT 237
ADE29583/C
ID ADE29583 standard; RNA; 19 BP.
XX
XX ADE29583;
XX
XX 29-JAN-2004 (first entry)
XX
XX Mitogen activated protein kinase siRNA oligonucleotide SEQ ID NO:205.
XX
XX short interfering nucleic acid; siRNA; downregulation; inhibition;
XX mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;
XX cytosolic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;
XX immunosuppressive; antibacterial; antirheumatic; antiarthritic;
XX antipsoriatic; gastrointestinal; obesity; diabetes; tumour;
XX inflammatory disease; asthma; septic shock; rheumatoid arthritis;
XX psoriasis; inflammatory bowel disease; drug screening;
XX genetic engineering; pharmacogenomic; gene mapping; ss.
XX
XX Synthetic.
XX
XX WO2003072590-A1.
XX
XX 04-SEP-2003.
XX
XX 28-JAN-2003; 2003WO-US002510.
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XX 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX
XX (SIRN-) SIRNA THERAPEUTICS INC.
PA
XX Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;
PI WPI; 2003-689980/65.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of cancer, downregulates expression of mitogen-activated
PT protein kinase genes.
XX
XX Example 3; SEQ ID NO 205; 164pp; English.
XX
XX The present invention describes a short interfering nucleic acid (siRNA)
CC that downregulates expression of a mitogen-activated protein kinase
CC (MAPK) genes by RNA interference. Also described: (1) a method for
CC modulating expression of MAPK genes in cells, tissue explants or
CC organisms by introduction of siRNA; (2) kits for in vitro or in vivo
CC delivery of siRNA; (3) conjugates and/or complexes of siRNA; and (4)
CC vectors that express siRNA and cells containing these vectors. MAPK siRNAs
CC have cytostatic, anorectic, antidiabetic, antinflammatory,
CC antiasthmatic, immunosuppressive, antibacterial, antirheumatic,
CC antiarthritic, antipsoriatic and gastrointestinal activities. The MAPK
CC siRNAs can be used to modulate the expression of MAPK genes, in cells,
CC tissue explants or organisms, e.g. for treating obesity; diabetes types I
CC and II; a wide range of tumours, and inflammatory diseases (asthma,
CC septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel
CC disease). They can also be used for drug screening; diagnosis; target
CC identification and validation; genetic engineering; pharmacogenomics;
CC studying gene function and gene mapping (e.g. of single-nucleotide
CC polymorphisms). The present sequence represents a MAPK siRNA which is used
CC in the exemplification of the present invention.
XX
XX Sequence 19 BP; 7 A; 6 C; 6 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 4.1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1035 CTTTGGCCTGGCCGCGAG 1051
DB 19 CTTTGGCCTGGCCGCGTG 3
|||||
CTTTGGCCTGGCCGCGTG 3
RESULT 238
ADE29420
ID ADE29420 standard; RNA; 19 BP.
XX
XX ADE29420;
XX
XX 29-JAN-2004 (first entry)
XX
XX Mitogen activated protein kinase siRNA oligonucleotide SEQ ID NO:42.
XX
XX short interfering nucleic acid; siRNA; downregulation; inhibition;
XX mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;
XX cytosolic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;
XX immunosuppressive; antibacterial; antirheumatic; antiarthritic;
XX antipsoriatic; gastrointestinal; obesity; diabetes; tumour;
XX inflammatory disease; asthma; septic shock; rheumatoid arthritis;
XX psoriasis; inflammatory bowel disease; drug screening;
XX genetic engineering; pharmacogenomic; gene mapping; ss.
XX
XX Synthetic.
XX
XX OS
XX 04-SEP-2003.
XX
XX 28-JAN-2003; 2003WO-US002510.
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WO2003072590-A1.

04-SEP-2003.

28-JAN-2003; 2003WO-US002510.

20-FEB-2002; 2002US-0358580P.

11-MAR-2002; 2002US-0363124P.

06-JUN-2002; 2002US-0386782P.

29-AUG-2002; 2002US-0406784P.

05-SEP-2002; 2002US-0408378P.

09-SEP-2002; 2002US-0409293P.

15-JAN-2003; 2003US-0440129P.

(SIRN-) SIRNA THERAPEUTICS INC.

Mcswiggen J, Beigelman L, Usman N, Haeberli P, Chowrira B;

WPI; 2003-689980/65.

New short interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer, downregulates expression of mitogen-activated protein kinase genes.

Example 3; SEQ ID NO 42; 164pp; English.

The present invention describes a short interfering nucleic acid (siRNA) that downregulates expression of a mitogen-activated protein kinase (MAPK) genes by RNA interference. Also described: (1) a method for modulating expression of MAPK genes in cells, tissue explants or organisms by introduction of siRNA; (2) kits for in vitro or in vivo delivery of siRNA; (3) conjugates and/or complexes of siRNA; and (4) vectors that express siRNA and cells containing these vectors. MAPK siRNAs have cytostatic, anorectic, antidiabetic, antiinflammatory, antitumorigenic, immunosuppressive, antibacterial, antirheumatic, antiasthmatic, antiparasitic and gastrointestinal activities. The MAPK siRNAs can be used to modulate the expression of MAPK genes, in cells, tissue explants or organisms, e.g. for treating obesity; diabetes types I and II; a wide range of tumours, and inflammatory diseases (asthma, septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel disease). They can also be used for drug screening; diagnosis; target identification and validation; genetic engineering; pharmacogenomics; studying gene function and gene mapping (e.g. of single-nucleotide polymorphisms). The present sequence represents a MAPK siRNA which is used in the exemplification of the present invention.

Sequence 19 BP; 0 A; 6 C; 6 G; 0 T; 7 U; 0 Other;

Query Match 0.9%; Score 15.4; DB 1; Length 19;

Best Local Similarity 70.6%; Pred. No. 4.1e+02;

Matches 12; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

QY 1035 CTTTGGCTGGCCGAG 1051

1 CUTUGGCCGCGCCG 17

RESULT 239

AAZ18214

ID AAZ18214 standard; DNA; 20 BP.

AC AAZ18214;

XX

DT 11-OCT-1999 (first entry)

XX

DE Tyrosine kinase gene specific primer 405.

XX

KW Genetic proximity; gene expression; cell characterisation; homeobox gene;

KW Genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;

KW Kinase gene; protein phosphatase; P450; steroid receptor; cadherin;

KW primer; ss.

XX

OS Synthetic.

Homo sapiens.

WO9934016-A2.

08-JUL-1999.

28-DEC-1998; 98WO-IL000625.

29-DEC-1997; 97TL-00122793.

16-OCT-1998; 98IL-00126627.

(GENE-) GENENA LTD.

Vider B;

WPI; 1999-419113/35.

P-PSDB; AAV14748.

Identifying and characterizing cells by comparing the pattern of gene expression in a selected gene family.

Claim 4; Page 48; 102pp; English.

The invention provides a new method for identifying and characterising cells. The method for determining the genetic proximity of a first cell and a second cell comprises: (a) obtaining the first cell and the second cell; (b) determining in the first cell and the second cell the pattern of expression of genes in a selected gene family; and (c) calculating a proximity index using a specified formula. The methods can be used for characterising cells, e.g. for determining the origin of a cell, its genetic status, whether it carries a genetic defect, or whether it is transformed. They can be used for detecting a selected genetic defect in an individual, e.g. a fetus. They can also be used for determining the effect of a selected treatment on a test cell. They can also be used for obtaining cells capable of expressing an homeobox related desired property. The method uses reverse transcriptase polymerase chain reaction (RT-PCR) for determining the pattern of gene expression in a selected gene family. Sequences AAZ17803-Z18342 represent primers that can be used in the RT-PCR reactions to determine the pattern of gene expression. The gene family can be selected from a set of homeobox genes, kinase genes, protein phosphatase genes, P450 enzyme genes, steroid receptor superfamily genes or cadherin superfamily genes

Sequence 20 BP; 3 A; 2 C; 7 G; 8 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.4; DB 1; Length 20;

Best Local Similarity 94.1%; Pred. No. 4.3e+02;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0

QY 1024 AAGCTGGCTGACTTGG 1040

1 AAGTGGCTGACTTGG 17

RESULT 240

ACF03629/c

ID ACF03629 standard; DNA; 20 BP.

AC ACF03629;

XX

DT 15-SEP-2003 (first entry)

XX

DE Human NOV4b reverse PCR primer SEQ ID NO:199.

XX

KW Human; NOVX; cytostatic; cardiant; antiinflammatory; immunosuppressive;

KW antiallergic; haemostatic; anti-HIV; antidiabetic; antiarteriosclerotic;

KW anorectic; antiasthmatic; nephrotropic; antiarthritic; hepatotropic;

KW neuroprotective; nontropic; antibacterial; virucide; antiparasitic;

KW relaxant; anticonvulsant; hypotensive; vasotrophic; antiparkinsonian;

KW vulnary; angiogenic; antiangiogenic; gene therapy; vaccine; cancer;

KW cardiomyopathy; atherosclerosis; hypertension; diabetes; inflammation;

KW autoimmune disorder; allergy; blood disorder; AIDS; obesity; asthma;

KW acquired immunodeficiency syndrome; nephropathy; cirrhosis; arthritis;

```

KW Alzheimer's disease; Parkinson's disease; goitre; infection; stroke;
KW muscular dystrophy; epilepsy; wasting disorder; PCR primer; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200294870-A2.
XX
PD 28-NOV-2002.
XX
PF 02-NOV-2001; 2001WO-US051580.
XX
PR 02-NOV-2000; 2000US-0245291P.
PR 02-NOV-2000; 2000US-0245317P.
PR 07-NOV-2000; 2000US-024562P.
PR 08-NOV-2000; 2000US-0246871P.
PR 26-JAN-2001; 2001US-0264389P.
PR 26-JAN-2001; 2001US-0264423P.
PR 29-JAN-2001; 2001US-0264799P.
XX
XX (CURA-) CURAGEN CORP.
XX
XX Grosse WM, Macdougall JR, Smithson G, Millet I, Stone DU;
XX Gunther E, Ellerman K, Alsbrook JP, Lepley DM, Burgess CE;
XX Spytek KA, Edinger SR, Gangolli EA, Gorman L, Taupier RJ, Li L;
XX Guo X, Fernandes ER, Vernet CAM, Tchernev VI, Casman SJ, Shenoy S;
XX Mishra V, Furtak K, Baumgartner JC, Colman SD;
XX WPI; 2003-140359/13.
XX
XX New NOVX polypeptide useful for preventing or treating NOVX-associated
XX disorders, e.g. cancer, cardiomyopathy, atherosclerosis or diabetes, and
XX in chromosome mapping, tissue typing or pharmacogenomics.
XX
XX Example 2; Page 293; 346pp; English.
XX
XX ACF03547 to ACF03570 encode the human NOVX proteins (I) given in ABR57412
XX to ABR57435. (I) have cytostatic, cardiant, antiinflammatory, nootropic,
XX immunosuppressive, antiallergic, haemostatic, anti-HIV, antidiabetic,
XX antiarteriosclerotic, anorectic, antiasthmatic, nephrotropic, virucide,
XX antiarthritic, hepatotropic, neuroprotective, antibacterial, relaxant,
XX antiparasitic, anticonvulsant, hypotensive, vasotropic, antiparkinsonian,
XX vulnary, angiogenic and antiangiogenic activities, and can be used in
XX gene therapy and vaccines. The NOVX polypeptides and their antibodies can
XX be used to determine the presence or absence of (I) in a sample. The NOVX
XX polypeptides, polynucleotides encoding them, and antibodies against them,
XX are useful in manufacturing a medicament for treating or preventing a
XX syndrome associated with a NOVX-associated disorder such as hypertension,
XX cardiomyopathy, atherosclerosis, cancer, diabetes, asthma, inflammation,
XX autoimmune disorders, allergies, blood disorders, obesity, acquired
XX immunodeficiency syndrome (AIDS), immunoglobulin (Ig)A nephropathy,
XX cirrhosis, arthritis, Alzheimer's disease, Parkinson's disease, goitre,
XX infections (e.g. bacterial, viral, parasitic), stroke, muscular
XX dystrophy, epilepsy, and other wasting disorders associated with chronic
XX diseases. ACF03571 to ACF03644 represent PCR primers and probes for NOVX
XX sequence, which are used in an example from the present invention
XX
XX Sequence 20 BP; 9 A; 3 C; 6 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.4; DB 1; Length 20;
XX Best Local Similarity 94.1%; Pred. No. 4.3e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 1240 TTCATCTTCGGTATCTT 1256
XX |||||
XX 18 TTCATCTTCGCATCTT 2
XX
XX RESULT 241
XX AAL62434/c
XX ID AAL62434 standard; DNA; 20 BP.
XX
XX AC AAL62434;

```

```

XX 06-OCT-2003 (first entry)
XX
XX Human ABC transporter MHC I antisense oligonucleotide, ISIS 206615.
XX
XX ABC transporter; ABCT; major histocompatibility complex; MHC; cytostatic;
XX hyperproliferative; autoimmune disorder; antisense gene therapy;
XX inflammation; tumour formation; immunosuppressive; antimicrobial; human;
XX phosphorothioate backbone; antisense; ss.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= a
XX /mod_base= OTHER
XX /note= "Phosphorothioate backbone; All cytidines are 5-
XX methylcytidines"
XX modified_base 1..5
XX /*tag= b
XX /mod_base= OTHER
XX /note= "2'methoxyethyl nucleotides"
XX modified_base 16..20
XX /*tag= c
XX /mod_base= OTHER
XX /note= "2'methoxyethyl nucleotides"
XX
XX WO2003051309-A2.
XX
XX 26-JUN-2003.
XX
XX 12-DEC-2002; 2002WO-US040101.
XX
XX 17-DEC-2001; 2001US-00024369.
XX
XX (ISIS-) ISIS PHARM INC.
XX Borchers AH, Ward DT, Freiler SM;
XX WPI; 2003-577305/54.
XX
XX New antisense compound that hybridizes and inhibits the nucleic acid
XX encoding ABC transporter major histocompatibility complex 1, for treating
XX diseases or conditions such as a hyperproliferative or autoimmune
XX disorder.
XX
XX Example 15; Page 81; 112pp; English.
XX
XX The invention relates to a compound targetted to a nucleic acid molecule
XX encoding ABC transporter (ABCT) major histocompatibility complex (MHC) I
XX where the compound specifically hybridises with the nucleic acid molecule
XX and inhibits expression of ATM or specifically hybridises with at least a
XX portion of an active site on the nucleic acid molecule. The invention is
XX useful for inhibiting the expression of ATM in cells or tissues. The
XX invention is useful for treating an animal with hyperproliferative or
XX autoimmune disorder. The invention is useful for diagnostics,
XX therapeutics, prophylaxis, as research reagents and kits, for
XX distinguishing functions of various members of a biological pathway and
XX in antisense gene therapy. The invention is also useful prophylactically
XX e.g., to prevent or delay infection, inflammation or tumour formation.
XX The present sequence is an antisense oligo targetted to human ABC
XX transporter MHC I DNA. This sequence is used to illustrate the method of
XX the invention
XX
XX Sequence 20 BP; 6 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.4; DB 1; Length 20;
XX Best Local Similarity 94.1%; Pred. No. 4.3e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 839 TCTTGTGATACCTGGAC 855
XX | |||||
XX
XX

```

Db 18 TATTGAGTACCTGGAC 2

RESULT 242
ADD18363/c
ID ADD18363 standard; DNA; 20 BP.
XX
XX
AC ADD18363;
XX
XX
DT 15-JAN-2004 (first entry)
XX
DE Human MOL protein related PCR primer Seq ID198.
XX
XX molecule protein; MOL protein; MOLX; MOLX agonist; MOLX antagonist;
XX
XX cardiant; antidiabetic; antiarteriosclerotic; gene therapy;
XX
XX MOLX-associated disorder; cardiomyopathy; diabetes; atherosclerosis;
XX
XX human; PCR; primer; ss.
XX
XX Homo sapiens.
XX
XX W02003003984-A2.
XX
XX 16-JAN-2003.
XX
XX 03-JUL-2002; 2002WO-US021268.
XX
XX 05-JUL-2001; 2001US-0303168P.
XX
XX 05-JUL-2001; 2001US-0303241P.
XX
XX 26-SEP-2001; 2001US-0096521P.
XX
XX 26-SEP-2001; 2001US-00965545.
XX
XX 26-SEP-2001; 2001US-00965546.
XX
XX 01-APR-2002; 2002US-0368996P.
XX
XX 01-APR-2002; 2002US-0369065P.
XX
XX 08-MAY-2002; 2002US-0378730P.
XX
XX 30-MAY-2002; 2002US-0384327P.
XX
XX 07-JUN-2002; 2002US-0386816P.
XX
XX 17-JUN-2002; 2002US-00174372.
XX
XX (CURA-) CURAGEN CORP.
XX
XX Fernandes ER, Vernet CAM, Shinkets RA, Anderson DW, Padigaru M;
XX
XX Boldog CL, Li L, Shenoy SG, Casman SJ, Rastelli L, Alsobrook JP;
XX
XX Burgess CF, Grosse WM, Gusev VV, Ji W, Lepley DM, Liu X, Mezick AJ;
XX
XX Paturajan M, Shen L, Spaderna SK, Spytek KA, Szekeres ES;
XX
XX Taupier RU, Tchernev VT, Zerhusen BD, Voss EZ;
XX
XX WPI; 2003-210304/20.
XX
XX New MOLX polypeptide, nucleic acid or MOLX-specific antibody, useful for
XX
XX preparing a composition for treating or preventing a MOLX-associated
XX
XX disorder, e.g., cardiomyopathy, diabetes or atherosclerosis.
XX
XX Example 15; SEQ ID NO 198; 371pp; English.
XX
XX This invention relates to novel human nucleic acid sequences which encode
XX
XX novel molecule (MOL) proteins numbered MOL1-23, referred to generally in
XX
XX the specification as MOLX. Compounds which modulate the function of the
XX
XX MOLX proteins of the invention, MOLX agonists or antagonists, may have
XX
XX cardiant, antidiabetic or antiarteriosclerotic activities. In addition,
XX
XX the DNA and protein sequences disclosed may prove useful for gene
XX
XX therapy. The protein, nucleic acid or antibody is useful for preparing a
XX
XX composition for treating or preventing a MOLX-associated disorder, for
XX
XX example cardiomyopathy, diabetes or atherosclerosis. The present sequence
XX
XX is that of a human PCR primer which was used in the exemplification of
XX
XX the invention.
XX
XX Sequence 20 BP; 2 A; 7 C; 3 G; 8 T; 0 U; 0 Other;
XX

Query Match 0.9%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. NO. 4.3e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 865 AACGAGTACCTGGATGA 881

Db 20 AACGAGGACCTGGATGA 4

RESULT 243
ADD56709
ID ADD56709 standard; DNA; 20 BP.
XX
XX
AC ADD56709;
XX
XX
DT 15-JAN-2004 (first entry)
XX
DE Human gene expression analysis multiplex Start-PCR primer #229.
XX
XX Gene expression; multiplex standardised reverse transcriptase-PCR;
XX
XX Start-PCR; high density oligonucleotide array; cDNA array;
XX
XX small biological sample; fine needle aspirate biopsy;
XX
XX laser captured microdissected material; human; primer; ss.
XX
XX Homo sapiens.
XX
XX U52003186246-A1.
XX
XX 02-OCT-2003.
XX
XX 28-MAR-2002; 2002US-00109349.
XX
XX 28-MAR-2002; 2002US-00109349.
XX
XX (WILL/) WILLEY J C.
XX
XX (CRAW/) CRAWFORD E L.
XX
XX Willey JC, Crawford EL;
XX
XX WPI; 2003-811730/76.
XX
XX Direct comparison of numerical gene expression values between samples of
XX
XX genes comprises using multiplex standardized reverse transcription-
XX
XX polymerase chain reaction.
XX
XX Example 1; SEQ ID NO 229; 59pp; English.
XX
XX The present invention relates to a method for the direct comparison of
XX
XX numerical gene expression values between samples of genes. The method
XX
XX comprises amplifying cDNA in the presence of a competitive template
XX
XX mixture and primer pairs for several genes and then amplifying aliquots
XX
XX of the PCR products using a primer pair specific for each gene. The
XX
XX method of amplification is by multiplex standardised reverse
XX
XX transcriptase-polymerase chain reaction (Start-PCR). High density
XX
XX oligonucleotide or cDNA arrays are used to measure PCR products following
XX
XX quantitative Start-PCR. The method is useful for the assessment of gene
XX
XX expression in small biological samples such as fine needle aspirate
XX
XX biopsies, and laser captured microdissected materials. The method allows
XX
XX for the standardised measurement of hundreds of genes from the same
XX
XX sample, which in prior art, could only be assessed for one gene. The
XX
XX present sequence represents a multiplex Start-PCR primer which can be
XX
XX used in the method of the present invention.
XX
XX Sequence 20 BP; 0 A; 10 C; 3 G; 7 T; 0 U; 0 Other;
XX

Query Match 0.9%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. NO. 4.3e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 825 GTCCCTCACCTTGCT 841

Db 4 GTCCCTCACCTTGCT 20

RESULT 244
AAV13323
ID AAV13323 standard; DNA; 21 BP.
XX
XX

AAV13323;
 14-MAY-1998 (first entry)
 Sense primer Exon 5 for human 5-lipoxygenase gene.
 Inflammatory disease; polymorphism; 5-lipoxygenase; asthma;
 ulcerative colitis; bronchitis; sinusitis; psoriasis; rhinitis;
 arthritis; diagnosis; treatment; PCR primer; ss.
 Synthetic.
 Homo sapiens.
 WO9742347-A2.
 13-NOV-1997.
 29-APR-1997; 97WO-US007137.
 06-MAY-1996; 95US-0016890P.
 25-APR-1997; 97US-00846020.
 (BGHM) BRIGHAM & WOMENS HOSPITAL.
 Drazen JM, In K, Asano K, Beier D, Grobholz J;
 WPI; 1997-558997/51.
 Classifying patients with inflammatory disease, specifically asthma -
 according to polymorphisms in 5-lipoxygenase gene regulatory region, e.g.
 to identify candidates for lipoxygenase inhibitor treatment.
 Example 1; Page 19; 56pp; English.
 The present sequence was used in the development of a novel method for
 classifying patients suffering from an inflammatory disease. The method
 comprises identifying in DNA from at least 1 patient a sequence
 polymorphism, as compared with the normal 5-lipoxygenase (5-LOX) gene
 (AA788431), in a 5-LOX regulatory gene sequence. The method can be
 applied to subjects with asthma, ulcerative colitis, bronchitis,
 sinusitis, psoriasis, allergic and non-allergic rhinitis, lupus or
 rheumatoid arthritis. Specifically it can be used to diagnose asthma or
 susceptibility to disease, identify treatments suitable for individual
 patients or assess the likely success of treatment
 Sequence 21 BP; 6 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.4; DB 1; Length 21;
 Best Local Similarity 94.1%; Pred. No. 4.5e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 992 AGAAGCTGCTCATCAAC 1008
 |||||
 4 AGAAGCTGCTCATCAAC 20
 Db
 RESULT 245
 AAV20817/C
 ID AAV20817 standard; DNA; 21 BP.
 XX
 AC AAV20817;
 XX
 XX
 DT 16-JUL-1998 (first entry)
 XX
 DE Primer for Human haematopoietic stem cell growth factor.
 XX
 KW Haematopoietic stem cell growth factor; SCGF; burst-promoting activity;
 KW BPA; granulocyte macrophage colony stimulating activity; gene therapy;
 KW GPA; haematopoietic cell disorder; bone marrow inhibition; human;
 KW PCR primer; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.

XX WO9808869-A1.
 XX 05-MAR-1998.
 XX 27-AUG-1997; 97WO-JP002985.
 XX 27-AUG-1996; 96JP-00262252.
 PR 24-MAR-1997; 97JP-00087242.
 PR 07-JUL-1997; 97WO-JP002349.
 XX (KYOW) KYOWA HAKKO KOGYO KK.
 XX
 XX Hiraoka A, Sugimura A, Mio H;
 XX WPI; 1998-179383/16.
 XX
 PT Haematopoietic stem cell growth factor - useful for, e.g. treatment and
 PT diagnosis of haematopoietic cell abnormalities and bone marrow
 PT inhibition.
 XX
 PS Example 21; Page 49; 85pp; Japanese.
 XX
 CC This sequence is a primer for DNA encoding the human haematopoietic stem
 CC cell growth factor (SCGF) of the invention. The polypeptide of the
 CC invention is of mammalian origin and has haematopoietic stem cell growth
 CC factor SCGF activity, including burst-promoting activity (BPA) and
 CC granulocyte macrophage colony stimulating activity (GPA). The products
 CC can be used for treatment, diagnosis and analysis of haematopoietic cell
 CC disorders and bone marrow inhibition, e.g. by cytotoxic anticancer agents
 CC such as 5-fluorouracil. The products can also be used for amplification
 CC of haematopoietic cells in vitro, e.g. for use in marrow grafting and
 CC gene therapy by insertion of SCGF gene using a suitable therapeutic
 CC vector
 CC
 XX Sequence 21 BP; 6 A; 5 C; 6 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.9%; Score 15.4; DB 1; Length 21;
 Best Local Similarity 94.1%; Pred. No. 4.5e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 614 CCTCATTTAAGCTGGAC 630
 |||||
 19 CCTGCATTAGCTGGAC 3
 Db
 RESULT 246
 AAF97411
 ID AAF97411 standard; DNA; 21 BP.
 XX
 AC AAF97411;
 XX
 XX 06-JUN-2001 (first entry)
 XX
 DE Human gene single nucleotide polymorphism #2172.
 XX
 KW Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
 KW polymorphism; vascular disease; coronary artery disease; forensics;
 KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
 KW pulmonary embolism; paternity test; ds.
 XX
 OS Homo sapiens.
 XX
 FH Key
 FT Variation
 FT replace(11,A)
 FT /*tag= a
 FT /standard_name= "single nucleotide polymorphism"
 XX
 XX WO200118250-A2.
 XX 15-MAR-2001.
 XX
 XX 07-SEP-2000; 2000WO-US024503.
 PF

```

XX 10-SEP-1999; 99US-0153357P.
PR 26-JUL-2000; 2000US-0220947P.
PR 16-AUG-2000; 2000US-0225724P.
XX
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX (MILL-) MILLENNIUM PHARM INC.
XX
XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GO, McCarthy JJ;
XX WPI; 2001-226749/23.
XX
XX Nucleic acids comprising single nucleotide polymorphisms, useful in
XX PT applications such as forensics, paternity testing, medicine, genetic
XX PT analysis and phenotype correlations to diseases such as diabetes and
XX PT atherosclerosis.
XX
XX Example; Page 197; 242pp; English.
XX
XX The present invention provides a method of diagnosing a vascular disease
XX in an individual, involving determining the sequence at various
XX CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4
XX CC genes. The sequences at a number of polymorphic sites are also provided
XX CC in the specification. In particular, the method can be used in the
XX CC diagnosis of atherosclerosis, myocardial infarction, coronary heart
XX CC disease, stroke, peripheral vascular diseases, venous thromboembolism and
XX CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
XX CC useful in forensics, paternity testing, genetic analysis and phenotype
XX CC correlations to diseases. The present sequence is an example of one of
XX CC the human gene SNPs shown in the specification
XX
XX Sequence 21 BP; 6 A; 4 C; 9 G; 2 T; 0 U; 0 Other;
XX
Query Match 0.9%; Score 15.4; DB 1; Length 21;
Best Local Similarity 94.1%; Pred. No. 4.5e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Oy 715 CTGGACATGAGAGGG 731
Db 4 CTGGACGTGAGAGGG 20
RESULT 247
AAD38761
ID AAD38761 standard; DNA; 21 BP.
XX
XX AAD38761;
XX
XX 23-SEP-2002 (first entry)
XX
XX Escherichia coli p0157 plasmid DNA amplifying PCR primer, stcE3'1773.
XX
XX p0157 plasmid; stcE protein; haemolytic uraemic syndrome; proteolysis;
XX KW Ci-esterase inhibitor; enterohaemorrhagic pathogen; antiinflammatory;
XX KW colitis; antibacterial; antidiarrhoeic; PCR; primer; ss.
XX
XX Escherichia coli.
XX
XX WO200234918-A2.
XX
XX 02-MAY-2002.
XX
XX 26-OCT-2001; 2001WO-US047719.
XX
XX 26-OCT-2000; 2000US-0243675P.
XX
XX (WISC ) WISCONSIN ALUMNI RES FOUND.
XX
XX Welch RA, Lathem WW;
XX
XX WPI; 2002-471441/50.
XX
XX New p0157 plasmid-specified polypeptide found in Escherichia coli and

```

```

PT other enterohaemorrhagic Escherichia coli, that binds to and cleaves Ci-
PT esterase inhibitor, useful for diagnosing and treating colitis.
XX
XX Example; Page 24; 58pp; English.
XX
XX The present invention relates to novel p0157 plasmid-specified proteins
XX found in Escherichia coli EDL933 and other enterohaemorrhagic E. coli,
XX CC designated stcE, that bind to and cleave Ci-esterase inhibitor. Sequences
XX CC of the invention are useful for diagnosing, preventing or treating
XX CC haemolytic uraemic syndrome or colitis in a subject infected with an
XX CC enterohaemorrhagic pathogen expressing inhibitor protein. They are useful
XX CC for testing a molecule for the ability to reduce proteolysis of Ci
XX CC esterase inhibitor by inhibitor protein. The present sequence is a PCR
XX CC primer which is used for amplifying E. coli p0157 plasmid DNA encoding
XX CC stcE protein. This primer is used in the exemplification of the invention
XX
XX Sequence 21 BP; 5 A; 4 C; 9 G; 3 T; 0 U; 0 Other;
XX
Query Match 0.9%; Score 15.4; DB 1; Length 21;
Best Local Similarity 94.1%; Pred. No. 4.5e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Oy 1220 CGGTGGAGGACAGCTA 1236
Db 1 CGGTGGAGGACGGCTA 17
RESULT 248
AA557349
ID AAX57349 standard; DNA; 23 BP.
XX
XX AAX57349;
XX
XX 22-JUL-1999 (first entry)
XX
XX Parvovirus B19 PCR primer 2.
XX
XX Detection; viral concentration; blood plasma; serum; PCR sensitivity;
XX KW extraction; amplification; detection; PCR primer; ss.
XX
XX Synthetic.
XX
XX Parvovirus.
XX
XX EP922771-A2.
XX
XX 16-JUN-1999.
XX
XX 03-NOV-1998; 98EP-00120799.
XX
XX 28-NOV-1997; 97DE-01052898.
XX
XX (CENT-) CENTEON PHARMA GMBH.
XX
XX Weimer T, Groener A;
XX
XX WPI; 1999-329400/28.
XX
XX Process to detect high concentrations of virus in blood plasma or serum,
XX PT by restricting the sensitivity of PCR.
XX
XX Example 1; Page 6; 8pp; German.
XX
XX This invention describes a novel method for for detection of high viral
XX CC concentrations in blood plasma or serum by restriction of PCR sensitivity
XX CC through suboptimal nucleic acid extraction, amplification and detection
XX CC conditions. The method described is used to detect high concentrations of
XX CC parvovirus in the blood plasma or serum of humans. The method detects
XX CC parvovirus DNA with a content in humans of greater than 106 to 107 genome
XX CC equivalents
XX
XX Sequence 23 BP; 6 A; 10 C; 4 G; 3 T; 0 U; 0 Other;
XX
Query Match 0.9%; Score 15.4; DB 1; Length 23;

```


Best Local Similarity 94.1%; Pred. No. 5e+02; Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1226 AGGCACGCTACACTTC 1242
DB |||||
2 AGGCACGCTACACTTC 18

RESULT 249
ADE36722/c
ID ADE36722 standard; DNA; 23 BP.
XX AC ADE36722;
XX DT 29-JAN-2004 (first entry)
XX DE DE3-1 plasmid construction related oligonucleotide SEQ ID NO:11.
XX KW neoplasm; Erbb-3; immune response; cytostatic; gene therapy; cancer;
XX OS human; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN WO2003080835-A1.
XX PD 02-OCT-2003.
XX PF 26-MAR-2003; 2003WO-CN000217.
XX PR 26-MAR-2002; 2002CN-00116259.
XX PA (ZENS-) ZENSUN SHANGHAI SCI TECH LTD.
XX PI Zhou M;
XX WPI; 2003-876924/81.
XX Use of an Erbb-3 protein, a nucleic acid encoding an Erbb-3 protein or their fragments, for treating, preventing or delaying neoplasms (e.g. urethra, uterus, vagina or vulva neoplasm) or cancers (e.g. breast, ovary or colon cancer).
XX Example; SEQ ID NO 11; 68pp; English.
XX The present invention describes a method for treating, preventing or delaying neoplasm in a mammal. The method comprises administering an Erbb-3 protein, a nucleic acid encoding an Erbb-3 protein or their functional fragments, where an immune response is generated against the neoplasm. Erbb-3 has cytostatic activity, and can be used in gene therapy. The method is useful for treating, preventing or delaying neoplasms (e.g. adrenal gland, anus, auditory nerve, bile ducts, bladder, bone, brain, breast, buccal, central nervous system, cervix, colon, ear, endometrium, esophagus, eye, eyelids, fallopian tube, gastrointestinal tract, head and neck, heart, kidney, larynx, liver, lung, mandible, mandibular condyle, maxilla, mouth, nasopharynx, nose, oral cavity, ovary, pancreas, parotid gland, penis, pinna, pituitary, prostate gland, rectum, retina, salivary glands, skin, small intestine, spinal cord, stomach, testes, thyroid, tonsil, urethra, uterus, vagina, vestibulocochlear nerve, or vulva neoplasm), or cancers (breast, ovary, stomach, prostate, colon and lung cancer). The present sequence represents an oligonucleotide used in the construction of a plasmid comprising Erbb-3, which is used in an example from the present invention.
XX Sequence 23 BP; 7 A; 12 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.4; DB 1; Length 23;
Best Local Similarity 94.1%; Pred. No. 5e+02; Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 229 AGTGGTGGTGGCGG 245
DB |||||

Db 20 AGTGGTGGTGGTGG 4

RESULT 250
AAT11977/c
ID AAT11977 standard; DNA; 20 BP.
XX AC AAT11977;
XX DT 25-MAR-2003 (revised)
XX DT 13-MAR-1996 (first entry)
XX DE CMV antisense oligonucleotide (ISIS 5477).
XX KW antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis; intermediate early complex; IE1; IE2; DNA polymerase gene; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /note= "phosphorothioate backbone"
XX PN US5442049-A.
XX PD 15-AUG-1995.
XX PF 25-JAN-1993; 93US-00009263.
XX PR 19-NOV-1992; 92US-00927506.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Baker B, Draper K, Anderson K;
XX WPI; 1995-292538/38.
XX New oligo-nucleotide inhibits cytomegalovirus replication - by binding to a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and treatment of CMV diseases.
XX Example 10; Col 17; 66pp; English.
XX AAT11971-84 are antisense oligonucleotides (ONs) against human cytomegalovirus (CMV) that displayed activities of at least 50 % of control (ISIS 2922 shown in AAT11961). It was found that up to 4 internal mismatches could be tolerated without loss of antiviral activity.
XX CC Antisense ONs targeting CMV DNA or RNA coding for the IE1, IE2 or DNA polymerase proteins have been shown to be effective in therapy, prophylaxis and diagnosis of CMV infection. The ONs may be modified to reduce nuclease resistance and to increase their efficacy. Modifications include phosphorothioate backbones, alkyl and halogen-substituted sugar moieties at the 2' position. (Updated on 25-MAR-2003 to correct Pf field.)
XX Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 4.7e+02; Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAACG 149
DB |||||
20 CGCAGAGAGAGAGCAACG 1

RESULT 251
AAT01675/c
ID AAT01675 standard; DNA; 20 BP.
XX AC AAT01675;
XX AC AAT01675;

DT	16-JUL-1999	(first entry)	
XX	Granule bound starch synthase primer #2.		
XX	Maize; corn; Zea mays; delta-9 desaturase; GBSS; target; substrate;		
XX	granule bound starch synthase; hammerhead ribozyme; hairpin ribozyme;		
XX	modulation; gene expression; transgenic plant; cleavage; canola plant;		
XX	caffeine synthesis; coffee plant; nicotine production; tobacco;		
XX	fruit ripening; flower pigmentation; lignin production; ss.		
XX	Synthetic.		
OS	Zea mays.		
XX	WO9710328-A2.		
XX	20-MAR-1997.		
XX	12-JUL-1996; 96WO-US011689.		
XX	13-JUL-1995; 95US-0001135P.		
XX	(RIBO-) RIBOZYME PHARM INC.		
XX	(DWC) DOWELANCO.		
XX	Zwick MG, Edington BE, Mcswiggen JA, Merlo PAO, Guo L, Skokut TA;		
XX	Young SA, Folkerts O, Merlo DJ;		
XX	WPI; 1997-202224/18.		
XX	Ribozyme which modulates plant gene expression - preferably modulates		
XX	expression of DELTA-9 desaturase or granule bound starch synthase in		
XX	maize or canola.		
XX	Example 27; Page 51; 155pp; English.		
XX	The present invention describes an enzymatic nucleic acid molecule (I)		
XX	with RNA cleaving activity, which modulates the expression of a plant		
XX	gene. Also described is a gene comprising a cDNA sequence encoding maize		
XX	Delta-9 desaturase. (I) can be used to modulate expression of a gene,		
XX	preferably Delta-9 desaturase or a granule bound starch synthase (GBSS)		
XX	gene, in a plant (preferably a maize or canola plant). (I) can be used to		
XX	modulate caffeine synthesis in a coffee plant, nicotine production in a		
XX	tobacco plant, fruit ripening processes in an apple, tomato, pear, plum		
XX	or peach plant, flower pigmentation in a rose, petunia, chrysanthemum or		
XX	marigold plant or lignin production in a tobacco, aspen, poplar or pine		
XX	plant		
XX	Sequence 20 BP; 3 A; 5 C; 7 G; 5 T; 0 U; 0 Other;		
XX	Query Match 0.9%; Score 15.2; DB 1; Length 20;		
XX	Best Local Similarity 85.0%; Pred. No. 4.7e+02;		
XX	Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;		
Qy	377 CTTGAGCCACGCTCTCGGAT 396		
Db	20 CATCAGCCACGCGATCGGAT 1		
XX	RESULT 253		
XX	AAK17949/G		
XX	ID AAK17949 standard; DNA; 20 BP.		
XX	AAK17949;		
XX	11-MAY-1999 (first entry)		
XX	Anti-CMV oligonucleotide #15103.		
XX	Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;		
XX	cytomegalovirus; inhibition; replication; sugar modification;		
XX	phosphorothioate; infection; retinitis; ss.		
XX	Synthetic.		

DR P-PSDB; AAY14670.

XX Identifying and characterizing cells by comparing the pattern of gene

PT expression in a selected gene family.

XX PS

XX Claim 4; Page 44; 102pp; English.

XX

CC The invention provides a new method for identifying and characterising

CC cells. The method for determining the genetic proximity of a first cell

CC and a second cell comprises: (a) obtaining the first cell and the second

CC cell; (b) determining in the first cell and the second cell the pattern

CC of expression of genes in a selected gene family; and (c) calculating a

CC proximity index using a specified formula. The methods can be used for

CC characterising cells, e.g. for determining the origin of a cell, its

CC genetic status, whether it carries a genetic defect, or whether it is

CC transformed. They can be used for detecting a selected genetic defect in

CC an individual, e.g. a fetus. They can also be used for determining the

CC effect of a selected treatment on a test cell. They can also be used for

CC obtaining cells capable of expressing an homeobox related desired

CC property. The method uses reverse transcriptase polymerase chain reaction

CC (RT-PCR) for determining the pattern of gene expression in a selected

CC gene family. Sequences AAZ17803-218342 represent primers that can be used

CC in the RT-PCR reactions to determine the pattern of gene expression. The

CC gene family can be selected from a set of homeobox genes, kinase genes,

CC protein phosphatase genes, P450 enzyme genes, steroid receptor

CC superfamily genes or cadherin superfamily genes

XX SQ Sequence 20 BP; 5 A; 8 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 4.7e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 970 CTACACCGAGACCTCAAGCC 989

DB 1 CTGCACCGTGACCTCAAGAC 20

RESULT 256

AAZ18149

ID AAZ18149 standard; DNA; 20 BP.

AC AAZ18149;

XX

DT 11-OCT-1999 (first entry)

XX

DE STX 14 gene specific primer.

XX

KW Genetic proximity; gene expression; cell characterisation; homeobox gene;

KW Genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;

KW Kinase gene; protein phosphatase; P450; steroid receptor; cadherin;

KW primer; ss.

XX

OS Synthetic.

OS Homo sapiens.

XX

PN WO9934016-A2.

XX

PD 08-JUL-1999.

XX

PF 28-DEC-1998; 98WO-IL000625.

XX

PR 29-DEC-1997; 97IL-00122793.

PR 16-OCT-1998; 98IL-00126627.

XX

PA (GENE-) GENENA LTD.

XX

PI Vidar B;

XX

DR WPI; 1999-419113/35.

DR P-PSDB; AAY14684.

XX

PT Identifying and characterizing cells by comparing the pattern of gene

PT expression in a selected gene family.

XX PS

XX Claim 4; Page 45; 102pp; English.

XX

CC The invention provides a new method for identifying and characterising

CC cells. The method for determining the genetic proximity of a first cell

CC and a second cell comprises: (a) obtaining the first cell and the second

CC cell; (b) determining in the first cell and the second cell the pattern

CC of expression of genes in a selected gene family; and (c) calculating a

CC proximity index using a specified formula. The methods can be used for

CC characterising cells, e.g. for determining the origin of a cell, its

CC genetic status, whether it carries a genetic defect, or whether it is

CC transformed. They can be used for detecting a selected genetic defect in

CC an individual, e.g. a fetus. They can also be used for determining the

CC effect of a selected treatment on a test cell. They can also be used for

CC obtaining cells capable of expressing an homeobox related desired

CC property. The method uses reverse transcriptase polymerase chain reaction

CC (RT-PCR) for determining the pattern of gene expression in a selected

CC gene family. Sequences AAZ17803-218342 represent primers that can be used

CC in the RT-PCR reactions to determine the pattern of gene expression. The

CC gene family can be selected from a set of homeobox genes, kinase genes,

CC protein phosphatase genes, P450 enzyme genes, steroid receptor

CC superfamily genes or cadherin superfamily genes

XX SQ Sequence 20 BP; 5 A; 8 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 4.7e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 970 CTACACCGAGACCTCAAGCC 989

DB 1 CTGCACCGTGACCTCAAGAC 20

RESULT 257

AAZ18163

ID AAZ18163 standard; DNA; 20 BP.

AC AAZ18163;

XX

DT 11-OCT-1999 (first entry)

XX

DE STX 21 gene specific primer.

XX

KW Genetic proximity; gene expression; cell characterisation; homeobox gene;

KW Genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;

KW Kinase gene; protein phosphatase; P450; steroid receptor; cadherin;

KW primer; ss.

XX

OS Synthetic.

OS Homo sapiens.

XX

PN WO9934016-A2.

XX

PD 08-JUL-1999.

XX

PF 28-DEC-1998; 98WO-IL000625.

XX

PR 29-DEC-1997; 97IL-00122793.

PR 16-OCT-1998; 98IL-00126627.

XX

PA (GENE-) GENENA LTD.

XX

PI Vidar B;

XX

DR WPI; 1999-419113/35.

DR P-PSDB; AAY14698.

XX

PT Identifying and characterizing cells by comparing the pattern of gene

PT expression in a selected gene family.

XX PS Claim 4; Page 45; 102pp; English.

XX The invention provides a new method for identifying and characterising
 CC cells. The method for determining the genetic proximity of a first cell
 CC and a second cell comprises: (a) obtaining the first cell and the second
 CC cell; (b) determining in the first cell and the second cell the pattern
 CC of expression of genes in a selected gene family; and (c) calculating a
 CC proximity index using a specified formula. The methods can be used for
 CC characterising cells, e.g. for determining the origin of a cell, its
 CC genetic status, whether it carries a genetic defect, or whether it is
 CC transformed. They can be used for detecting a selected genetic defect in
 CC an individual, e.g. a fetus. They can also be used for determining the
 CC effect of a selected treatment on a test cell. They can also be used for
 CC obtaining cells capable of expressing an homeobox related desired
 CC property. The method uses reverse transcriptase polymerase chain reaction
 CC (RT-PCR) for determining the pattern of gene expression in a selected
 CC gene family. Sequences AAZ17803-218342 represent primers that can be used
 CC in the RT-PCR reactions to determine the pattern of gene expression. The
 CC gene family can be selected from a set of homeobox genes, kinase genes,
 CC protein phosphatase genes, P450 enzyme genes, steroid receptor
 CC superfamily genes or cadherin superfamily genes
 XX
 SQ Sequence 20 BP; 5 A; 8 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 4.7e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 970 CTACCCGAGACCTCAAGCC 989
 DB 1 CTGACCGTGACTCAAGAC 20

RESULT 258
 AAX86355
 ID AAX86355 standard; DNA; 20 BP.

AC AAX86355;

29-SEP-1999 (first entry)

PCR primer used to amplify the penicillin G amidase gene.

groEL gene; expression vector; tac promoter; groEL; intergenic region;
 cephalosporin amidase; penicillin G amidase; PCR primer; ss.

Synthetic.
 Escherichia coli.

WO9931220-A1.

24-JUN-1999.

11-DEC-1998; 98WO-US026343.

16-DEC-1997; 97US-0069751P.

(BRIM) BRISTOL-MYERS SQUIBB CO.

Liu SW, Franceschini T;

WPI; 1999-457923/38.

New high expression vector for Escherichia coli useful for expression of
 heterologous genes.

Disclosure; Page 10; 37pp; English.

PCR primers AAX86355-56 were used to amplify the penicillin G amidase
 gene Escherichia coli. The amplified fragment was used to construct the
 expression vector of the invention. This expression vector comprises the
 tac promoter, the groEL intergenic region of DNA and the start codon of
 the groEL gene. Expression of the groEL and/or groES proteins along with
 the expressed, heterologous protein of interest leads to stabilization of

CC the expressed protein. The new vectors yield higher titers of expressed
 CC enzymes relative to prior art vectors such as T7 RNA polymerase-based pET
 CC vectors. Also, when constitutive promoters are used in the new vectors,
 CC an inducer is not required to trigger expression of the heterologous
 CC protein. This may decrease the cost of the production of the protein and
 CC simplifies the fermentation process. The new vectors are used to obtain
 CC high yields of heterologous proteins expressed in microbial host cells,
 CC especially Escherichia coli. In particular, the new vectors are used to
 CC express the enzymes cephalosporin amidase or penicillin G amidase
 XX

SQ Sequence 20 BP; 10 A; 2 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 4.7e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1433 CAGAGGATGCCATCAACAT 1452
 DB 1 CAGAGGATATCATGAAAAT 20

RESULT 259
 AAX60861/c

ID AAX60861 standard; DNA; 20 BP.

AC AAX60861;

09-AUG-1999 (first entry)

CDK4 specific antisense oligo HYB103173.

Cyclin-dependent kinase 4; CDK4; antisense; G1/S phase transition;
 cancerous cell; cyclin D1; P16; tumour growth; ss.

Synthetic.

WO9927087-A1.

03-JUN-1999.

21-NOV-1997; 97WO-US022234.

21-NOV-1997; 97WO-US022234.

(HYBR-) HYBRIDON INC.

Morrissey D, Von Hofe B;

WPI; 1999-357832/30.

Antisense oligonucleotide targeted to cyclin-dependent kinase 4 gene,
 useful for regulating G1 to S phase transition in a cell.

Claim 3; Page 17; 60pp; English.

Sequences AAX60831-864 represent synthetic oligonucleotides complementary
 to a cyclin-dependent kinase 4 (CDK4) nucleic acid. The antisense
 oligonucleotides are used to regulate G1/S phase transition, especially
 to inhibit growth of cancerous cells. The oligonucleotides can be
 administered in the form of a therapeutic composition to treat a mammal
 afflicted with a tumour associated with aberrant expression of CDK4,
 cyclin D1, or P16, to reduce tumour growth

SQ Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 4.7e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1086 GGTGGTGACACTGTGTGATCC 1105
 DB 20 GGTGTGTACTCTGTGTACC 1

```
RESULT 260
AAZ27716
ID AAZ27715 standard; DNA; 20 BP.
XX
XX
AC AAZ27716;
XX
XX 01-JUN-1999 (first entry)
XX
XX PCR primer hgh S2.1.
XX
XX Porcine; totipotent cell; pluripotent; primordial germ cell; PGC;
XX porcine stem cell factor; transgenic pig; xenotransplantation; ES;
XX cell differentiation; gene regulation; embryonic development; pSCF;
XX embryonic stem cell; steel factor; PCR primer; ss.
XX
XX Synthetic.
OS
XX
XX WC9909141-A1.
PN
XX
XX 25-FEB-1999.
PD
XX
XX 13-AUG-1998; 98WO-US016782.
XX
XX 14-AUG-1997; 97US-0055643P.
XX
XX (BIOT-) BIOTRANSPLANT INC.
PA
XX
XX Brem G, Baetscher M;
PI
XX
XX WPI; 1998-181024/15.
DR
XX
XX Production of pluripotent or totipotent porcine stem cell lines - by long
XX term culture of transfected murine STO feeder cells with a porcine stem
XX cell factor, useful for, e.g. xenotransplantation.
XX
XX Example 4; Page 34; 80pp; English.
XX
XX The invention relates to an isolated porcine totipotent cell. A porcine
XX pluripotent or totipotent cell, can be produced by culturing either a
XX porcine primordial germ cell (PGC) or other totipotent cell with a
XX porcine stem cell factor (pSCF). Cell lines produced are useful for the
XX generation of transgenic pigs, and for xenotransplantation. They are also
XX useful for studying cell differentiation and gene regulation during
XX embryonic development. The use of totipotent or pluripotent cells, like
XX embryonic stem (ES) cells, in a totipotent-cell-embryo-injection-method
XX enables specific gene alterations, which allow the study of specific gene
XX function in a resulting chimeric animal line
XX
XX Sequence 20 BP; 5 A; 9 C; 3 G; 3 T; 0 U; 0 Other;
XX
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 4.7e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 424 ATGCGCACCATCCCCACG 443
DB 1 ATGCGCACCATCCCCAAG 20
XX
RESULT 261
AAZ44825
ID AAZ44825 standard; DNA; 20 BP.
XX
XX AAZ44825;
AC
XX
XX 19-APR-2000 (first entry)
DT
XX
XX Human PADD primer ISIS #101862.
DE
XX
XX FADD; human; antisense; inhibitor; Fas-associated death domain; primer;
XX probe; ss.
XX
```

```
OS Homo sapiens.
XX
XX US6015712-A.
XX
XX 18-JAN-2000.
XX
XX 19-JUL-1999; 99US-00357072.
XX
XX 19-JUL-1999; 99US-00357072.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Monia BP, Cowser LM, Baker BF, Zhang H;
XX
XX WPI; 2000-126316/11.
XX
XX Antisense oligonucleotides, useful for inhibiting human Fas-associated
XX death domain (FADD) expression are targeted to the 3' untranslated region
XX of the FADD gene.
XX
XX Claim 3; Col 69-70; 37pp; English.
XX
XX This invention describes novel antisense oligonucleotides (OGNs) (I) 8-20
XX nucleotides in length that specifically hybridize with and inhibit
XX nucleic acids encoding human Fas-associated death domain (FADD), targeted
XX to the 3' untranslated region (3'UTR). (I) can be used to treat animals,
XX especially humans, suspected of having or being prone to a disease or
XX condition associated with FADD expression. AAZ44746-244831 represent
XX primers and probes used in the method of the invention
XX
XX Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
XX
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 4.7e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 46 GGACACGACGAGTGACTGCT 65
DB 1 GGAGTACAGTGACTGCT 20
XX
RESULT 262
AAC68207
ID AAC68207 standard; DNA; 20 BP.
XX
XX AAC68207;
AC
XX
XX 19-FEB-2001 (first entry)
DT
XX
XX Gene typing PCR primer #2.
DE
XX
XX Human leukocyte antigen; HLA; gene typing; infectious disease;
XX autoimmune disease; inflammation; cancer; PCR primer; ss.
XX
XX Homo sapiens.
OS
XX
XX CA2299675-A1.
PN
XX
XX 12-SEP-2000.
PD
XX
XX 10-MAR-2000; 2000CA-02299675.
XX
XX 12-MAR-1999; 99US-0124113P.
XX
XX (UYMA-) UNIV MANITOBA.
PA
XX
XX Luo M, Brunham RC, Pan Y, Brunham K;
PI
XX
XX WPI; 2000-679930/67.
DR
XX
XX Typing polymorphic genes, useful to assess the association of alleles
XX with diseases and in disease diagnosis, uses a taxonomy based sequence
XX analysis in which a typing tree based on distinguishing sequences is
XX
```

PT constructed.

PS Disclosure; Page 64; 125pp; English.

XX The present invention provides a novel method for typing genes, particularly human leukocyte antigen (HLA) coding sequences. The method uses DNA sequences and a taxonomy-based sequence analysis method to assign alleles for HLA-DQA1, HLA-DQB1 and HLA-DRB. These alleles have been linked to diseases such as diabetes, IGA deficiency, multiple sclerosis, cancer, clinical and immunological manifestations of HIV infection, coeliac disease, idiopathic nephrotic syndrome, immune responses to parasite antigens, pemphigus vulgaris, inflammatory bowel disease, rheumatoid arthritis, allergy and other inflammatory diseases

XX Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 4.7e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1427 TCTCCGACAGGATGCGCATG 1446
|||||

Db 1 TCTCCGACAGGATGCTTGTG 20
|||||

RESULT 263
AAC79506/c
ID AAC79506 standard; DNA; 20 BP.

XX AAC79506;

XX 07-FEB-2001 (first entry)

XX Human p38beta antisense oligonucleotide SEQ ID 29.

XX Antisense oligonucleotide; p38 mitogen activated protein kinase; MAPK; anti-rheumatic; antiarthritic; immunosuppressive; cardiant; heart disease; antiinflammatory; autoimmune disease; rheumatoid arthritis; apoptosis; phosphorothioate; ss.

XX Homo sapiens.

XX WO2000059919-A1.

XX 12-OCT-2000.

XX 04-APR-2000; 2000WO-US0008794.

XX 06-APR-1999; 99US-00286904.

XX (ISIS-) ISIS PHARM INC.

XX Monia BP, Gaarde WA, Nero PS, McKay R, Popoff I;

XX WPI; 2000-664982/64.

XX Antisense compound targeted to p38 mitogen activated protein kinase inhibits protein kinase and is useful for diagnosing and treating inflammatory, autoimmune and heart disease.

XX Example 3; Page 43; 90pp; English.

XX This invention relates to antisense compounds 8-30 nucleobases in length targeted to the 5'-untranslated region, translational start site, translational termination region or 3'-untranslated region of a nucleic acid encoding a p38 mitogen activated protein kinase (MAPK), where the antisense oligonucleotides inhibit the expression of MAPK. Sequences AAC79480 and AAC79501 represent human p38alpha MAPK and p38beta MAPK cDNA sequences. AAC79481 - AAC79500 and AAC79553 - AAC79521 represent human p38alpha antisense oligonucleotides, while AAC79502 - AAC79521 and AAC79571 - AAC79580 represent human p38beta antisense oligonucleotides. Also included in the invention are a p38alpha cDNA sequence AAC79523 and antisense oligonucleotides AAC79523 - AAC79536 isolated from rat tissue.

CC Murine p38beta MAPK cDNA is represented in AAC79537 and antisense oligonucleotides targeting the sequence are given in AAC79538 - AAC79552.

CC The antisense oligonucleotides have antirheumatic; antiarthritic; immunosuppressive; cardiant and antiinflammatory activity. The antisense oligonucleotides are useful for inhibiting the expression of p38 MAPK in cells or tissues. The oligonucleotides are used for treating an animal with diseases such as inflammatory or autoimmune diseases e.g. rheumatoid arthritis, or heart disease. The oligonucleotides are also useful for inhibiting inflammation or apoptosis

XX Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 4.7e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 764 TGCTCAGGACCTCAACAC 783
|||||

Db 20 TGCTCAGGACCTGAGCAC 1
|||||

RESULT 264
ABZ80677/c
ID ABZ80677 standard; DNA; 20 BP.

XX ABZ80677;

XX 13-JUN-2003 (first entry)

XX Beagle dog ob gene PCR amplification primer OBREV.

XX ss; dog; canine; obese gene; leptin; PCR; primer; amplification.

XX Canis familiaris.

XX JP2000279171-A.

XX 10-OCT-2000.

XX 30-MAR-1999; 99JP-00088295.

XX 30-MAR-1999; 99JP-00088295.

XX (WOMI) MORINAGA & CO LTD.

XX WPI; 2001-027452/04.

XX A canine obese gene, its gene product, its preparation, its measuring reagent and measurement.

XX Example 1; Page 8; 18pp; Japanese.

XX The invention relates to the isolation of a canine Ob gene (obese gene) especially from beagle dogs. The gene is isolated from a dog DNA library using primers ABZ80676-ABZ80690. This sequence represents a PCR primer used to isolates the gene encoding the Ob protein. The invention also includes a vector comprising the DNA and a host cell transformed with the vector. The sequence is used for the large scale preparation of canine leptin

XX Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 4.7e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1075 TACTCCAATGAGGTGTGAC 1094
|||||

Db 20 TACTCCACAGAGGTGTGGC 1
|||||

RESULT 265
AAC91033/c

```
ID XX AAC91033 standard; DNA; 20 BP.
AC XX AAC91033;
DT XX 15-MAR-2001 (first entry)
DE XX Primer MUC5B reverse.
XX XX
XX XX Immortal cell line; middle ear epithelial; hearing disorder;
XX XX otitis media; primer; ss.
XX XX Unidentified.
XX XX
XX XX WO200073419-A1.
XX XX 07-DEC-2000.
XX XX 26-MAY-2000; 2000WO-US014751.
XX XX 28-MAY-1999; 99US-0136736P.
XX XX (HOU-) HOUSE EAR INST.
XX XX Lim DJ, Chun Y, Rhim JS;
XX XX WPI; 2001-041148/05.
XX XX
XX XX New immortalized non-tumorigenic human middle ear epithelial cell line
XX XX useful for studying gene and protein expression in otitis media, and for
XX XX identifying chemical and biological agents for treating otitis media.
XX XX
XX XX Example 11; Page 30; 53pp; English.
XX XX
XX XX The present invention relates to a substantially pure cell line of
XX XX immortalized non-tumorigenic human middle ear epithelial cells, which
XX XX express an exogenous immortalizing gene. The cell line is useful for
XX XX studying the molecular mechanisms involved in the pathogenesis that
XX XX results in hearing disorders, e.g. hearing loss or otitis media. The cell
XX XX lines are also useful for studying the normal cell biology of human
XX XX middle ear epithelial cells. The cell lines can also be used as a
XX XX screening tool for identifying agents that may be useful in therapy
XX XX
XX XX Sequence 20 BP; 2 A; 5 C; 7 G; 6 T; 0 U; 0 Other;
XX XX
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 4.7e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1326 CAAGTACCGAGCGGAGGCC 1345
DB 20 CAAGTACTCAGCAGAGGCC 1
RESULT 266
AAF87532
ID AAF87532 standard; DNA; 20 BP.
XX XX
XX XX AAF87532;
XX XX 10-JUL-2001 (first entry)
XX XX
XX XX Human-specific globin primer #3.
XX XX
XX XX Human; globin; neuroprotective; nootropic; antiparkinsonian;
XX XX antilepaemic; antiarteriosclerotic; antidiabetic; dermatological;
XX XX antinflammatory; antitumor; vulnary; immunosuppressive; cell therapy;
XX XX non-haematopoietic lineage cell; vascular disorder; arteriosclerosis;
XX XX skin disorder; PCR primer; ss.
XX XX
XX XX Homo sapiens.
XX XX WO200121766-A2.
XX XX
PD XX 29-MAR-2001.
XX XX
XX XX 22-SEP-2000; 2000WO-US026020.
XX XX
XX XX 23-SEP-1999; 99US-0156031P.
XX XX 10-JUL-2000; 2000US-0217439P.
XX XX
XX XX (CELL-) CELL SCI THERAPEUTICS.
XX XX
XX XX Pykett MJ, Rosenzweig M, Banu N;
XX XX
XX XX WPI; 2001-281603/29.
XX XX
XX XX Producing non-hematopoietic lineage cells from hematopoietic progenitor
XX XX cells for use in tissue repair, transplantation, involves culturing the
XX XX progenitor cells under environment that promotes cell differentiation.
XX XX
XX XX Example 2; Page 32; 42pp; English.
XX XX
XX XX The present sequence is a PCR primer which was used to amplify human
XX XX globin DNA in an example illustrating an invention relating to a method
XX XX for obtaining non-hematopoietic lineage cells from hematopoietic
XX XX progenitor cells (HPCs). The non-hematopoietic lineage cells are useful
XX XX in the therapeutic treatment of various pathological conditions such as
XX XX tissue repair, tissue transplantation and tissue reimplantation. They
XX XX are useful for treating neurodegenerative disorders such as Alzheimer's
XX XX disease, multiple sclerosis and Parkinson's disease, and vascular
XX XX disorders such as arteriosclerosis, coronary artery disease, aortic
XX XX aneurysm and arterial diseases of the lower extremities. The cells may be
XX XX used in the treatment of other diseases associated with early
XX XX arteriosclerosis including diabetes mellitus, hypertension, familial
XX XX hypercholesterolaemia and familial combined hyperlipidaemia. They may
XX XX also be used to treat disorders of the skin, such as eczema and
XX XX psoriasis. The present sequence was used in an assay to demonstrate in
XX XX vivo homing of human non-hematopoietic lineage cells to the brain of
XX XX transplanted mice. PCR specific for human globin was performed with brain
XX XX and muscle cells of the transplanted and nontransplanted mice. A PCR
XX XX product was detected only in the brain cells, indicating that the human
XX XX cells were only present in the brain
XX XX
XX XX Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;
XX XX
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 4.7e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1627 GGCCCCAGCAGCGAGCGGCT 1646
DB 1 GTACACGAGCAGCGAGGCT 20
RESULT 267
AAF27086
ID AAF27086 standard; DNA; 20 BP.
XX XX
XX XX AAF27086;
XX XX 06-APR-2001 (first entry)
XX XX
XX XX Human MEKK1 phosphorothioate antisense oligonucleotide, SEQ ID NO:8.
XX XX
XX XX Human MEKK1; mitogen-activated protein kinase kinase kinase 1;
XX XX MEK kinase 1; MAP/ERK kinase kinase 1; pro-apoptotic;
XX XX apoptosis signal regulation; programmed cell death;
XX XX serine/threonine kinase; MAP kinase cascade; JNK/SAPK;
XX XX Jun N-terminal kinase/stress-activated protein kinase; Bcl-2 substrate;
XX XX NF-kappa-B-mediated transcription regulation; expression inhibition;
XX XX antisense; hyperproliferative disorder; cancer; inflammation;
XX XX phosphorothioate; ss.
XX XX
XX XX Homo sapiens.
XX XX US6168950-B1.
XX XX
```



```
XX PD 02-JAN-2001.
XX PF
XX PR
XX PR 23-JUL-1999; 99US-00359756.
XX PR 23-JUL-1999; 99US-00359756.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Monia BP, Cowsett LM, Gaarde W, Ward DT;
XX PI WPI; 2001-122264/13.
XX DR
XX PT New antisense compound targeting nucleic acid encoding human mitogen-
XX PT activated protein kinase kinase 1 (MEKK1), useful for treating diseases
XX PT or conditions associated with MEKK1 expression, or preventing
XX PT inflammation or tumor formation.
XX PS
XX PS Claim 14; Col 39; 35pp; English.
XX CC Sequences AAF27086-AAF27125 represent phosphorothioate antisense
XX CC oligonucleotides targetted to the human MEKK1 gene, which inhibit its
XX CC expression. The antisense oligonucleotides were designed to target
XX CC different regions of the human MEKK1 RNA, and were analysed for their
XX CC effect on MEKK1 mRNA levels by quantitative real-time PCR. MEKK1 (also
XX CC known as mitogen-activated protein kinase kinase 1, MEK kinase 1
XX CC and MAP/ERK kinase kinase 1) is a dual-specific serine/threonine kinase
XX CC which mediates cellular responses to mitogenic stimuli, being involved in
XX CC JNK/SAPK (Jun N-terminal kinase/stress-activated protein kinase) MAP
XX CC kinase cascades. MEKK1 regulates signalling events associated with
XX CC apoptosis (programmed cell death) and NF-kappa-B, both of which have been
XX CC associated with the development of hyperproliferative disorders such as
XX CC cancer. Specifically, MEKK1 lies directly downstream of Bcl-2 in an
XX CC apoptotic signalling cascade, and plays a critical role in the control of
XX CC NF-kappa-B-mediated transcription at multiple points in the apoptotic
XX CC cascade. The oligonucleotides of the invention are useful for diagnosis,
XX CC prevention and treatment of conditions associated with MEKK1 expression,
XX CC such as inflammation, and cancer and other hyperproliferative disorders
XX SQ Sequence 20 BP; 0 A; 12 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 4.7e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 552 GCCCTCTCAGCCGCGCTCC 571
Db 1 GCTCTCTCAGCCGCGCTGC 20
|||||
|||||

RESULT 268
AAD36658
XX ID AAD36658 standard; DNA; 20 BP.
XX AC
XX AC AAD36658;
XX XX
XX DT 09-AUG-2002 (first entry)
XX DE Human Her-1 antisense oligonucleotide ISIS #128532.
XX KW Human; epidermal growth factor receptor; hyperproliferative disease;
XX KW Her1; antisense; prophylaxis; psoriasis; phosphorothioate backbone;
XX KW tumour; cancer; ss.
XX XX
XX OS Homo sapiens.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "Phosphorothioate backbone"
XX FT modified_base 1..5
```

```
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 5
FT /*tag= d
FT /mod_base= m5c
FT modified_base 6
FT /*tag= e
FT /mod_base= m5c
FT modified_base 8
FT /*tag= f
FT /mod_base= m5c
FT modified_base 9
FT /*tag= g
FT /mod_base= m5c
FT modified_base 12
FT /*tag= h
FT /mod_base= m5c
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX WO200226758-A1.
XX 04-APR-2002.
XX 28-SEP-2001; 2001WO-US030551.
XX 29-SEP-2000; 2000US-00676610.
XX (ISIS-) ISIS PHARM INC.
XX Bennett CF, Wyatt JR, Freier SM;
XX WPI; 2002-394234/42.
XX Novel antisense oligonucleotide that specifically hybridizes with and
XX inhibits nucleic acid encoding epidermal growth factor receptor, useful
XX for treating hyperproliferative disease such as cancer or psoriasis.
XX Claim 1; Page 47; 169pp; English.
XX The invention relates to an antisense oligonucleotide targetted to a
XX nucleic acid molecule encoding human epidermal growth factor receptor
XX (Her1) to inhibit its expression. The antisense compounds are useful for
XX treating diseases or conditions associated with Her-1 such as
XX hyperproliferative diseases especially cancer (lung, ovarian, colon or
XX prostate cancer) and psoriasis. They are also useful as research
XX reagents, diagnostics, therapeutics, kits and prophylactically e.g. to
XX prevent or delay tumour formation. The present sequence is an antisense
XX oligonucleotide targetted to human Her-1
XX SQ Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 4.7e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 950 ACTGCCACCGCGCAGAGTGC 969
Db 1 AATGCCACCGCGCAGAGTGC 20
|||||
|||||

RESULT 269
RAL48714
XX ID AAL48714 standard; DNA; 20 BP.
XX AC
XX AC AAL48714;
XX XX
XX DT 15-OCT-2002 (first entry)
XX DE Chimeric beta-glucuronidase enzyme PCR primer SEQ ID NO: 40.
```

```
XX Plant; mismatch repair; chemical inhibitor; hypermutable; PCR; primer;
KW ss.
XX
XX Unidentified.
OS
XX Unidentified.
OS
XX Chimeric.
XX
XX WO200254856-A1.
FN
XX
XX 18-JUL-2002.
PD
XX
XX 15-JAN-2001; 2001WO-US000934.
XX
XX 15-JAN-2001; 2001WO-US000934.
XX
XX (MORP-) MORPHOTEK INC.
PA
XX
XX Nicolaides NC, Grasso L, Sass PM;
XX
XX WPI; 2002-599624/64.
XX
XX Making hypermutable cell for agricultural, pharmaceutical or
PT environmental applications, by exposing cell to mismatch repair inhibitor
PT such as anthracene, ATPase inhibitor, nuclease inhibitor or polymerase
PT inhibitor.
XX
XX Example 6; Page 111; 114pp; English.
XX
XX The present invention relates to a method of making a hypermutable cell,
XX involving exposing a cell to a chemical inhibitor of mismatch repair. The
XX method is useful for making a hypermutable cell, in particular a plant
XX cell, and for creating genetically altered host cells or organisms for
XX agricultural, chemical manufacturing, pharmaceutical and environmental
XX applications. The present sequence is a PCR primer used to sequence a
XX chimeric beta-glucuronidase reporter enzyme coding sequence for use in
XX the exemplification of the invention
XX
XX Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 4.7e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1723 CATGTTCACTGCGCCACTTG 1742
DB 1 CATGTTCACTGCGCCACTCG 20
RESULT 270
AAD39520/c
XX AAD39520 standard; DNA; 20 BP.
XX
XX AAD39520;
XX
XX 04-OCT-2002 (first entry)
XX
XX Human calreticulin antisense oligonucleotide, ISIS 109113.
XX
XX Human; calreticulin; antisense compound; hyperproliferative disorder;
XX cancer; autoimmune disease; viral infection; cardiovascular disease;
XX antisense therapy; cytostatic; immunosuppressive; virucide; antisense;
XX phosphorothioate backbone; ss.
XX
XX Homo sapiens.
OS
XX Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
FT modified_base 1..5
```

```
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 6..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 13
FT /*tag= d
FT /mod_base= m5C
XX
XX WO200236743-A2.
XX
XX 10-MAY-2002.
XX
XX 30-OCT-2001; 2001WO-US049045.
XX
XX 30-OCT-2000; 2000US-00702327.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CP, Cowse LM;
XX
XX WPI; 2002-479759/51.
XX
XX Novel antisense compound targeted to nucleic acid encoding calreticulin,
XX useful for treating a human having disease or condition associated with
XX calreticulin e.g. cancer, viral infection, autoimmune disease.
XX
XX Claim 3; Page 82; 109pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of calreticulin. The compositions comprise
XX antisense compounds, particularly antisense oligonucleotides, targeted
XX to nucleic acids encoding calreticulin. The antisense compound is useful
XX for inhibiting the expression of calreticulin in human cells or tissues.
XX It is also useful for treating a human having a disease or condition
XX associated with calreticulin, e.g., hyperproliferative disorder e.g.
XX cancer, autoimmune disease, viral infection or cardiovascular disease, by
XX inhibiting expression of calreticulin. It is useful for diagnostics,
XX therapeutics, prophylaxis and as research reagents and kits. It is also
XX used in antisense therapy. The present sequence is an antisense compound
XX targeted to human calreticulin. This sequence is used to study the
XX antisense inhibition of calreticulin expression-phosphorothioate 2'-MOE
XX gapmer oligonucleotides
XX
XX Sequence 20 BP; 7 A; 1 C; 7 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 4.7e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 540 CATCTTTGACAGCCCTCA 559
DB 20 CATCTTTGACAACTTCTCA 1
RESULT 271
ABK50599/c
XX
XX ID ABK50599 standard; DNA; 20 BP.
XX
XX AC ABK50599;
XX
XX 30-JUL-2002 (first entry)
XX
XX FAM modified probe #4.
XX
XX Method for screening genomic DNA; target sequence; transgenic screening;
XX organism identification; targeted mutagenesis screening method; mouse;
XX probe; ss.
XX
XX Mus sp.
XX
```

PN WO200220842-A1.
XX
PD 14-MAR-2002.
XX
PF 04-SEP-2001; 2001WO-US027404.
XX
PR 06-SEP-2000; 2000US-0230371P.
XX
PR 04-SEP-2001; 2001US-00230371.
XX
PA (HODG/) HODGE T A.
XX
PI Hodge TA;
XX
PI WPI; 2002-371884/40.
XX
DR
XX
PT Detecting designated genetic sequence in genomic DNA sample, comprises
PT depositing genomic DNA on substrate, adding labeled probe specific for
PT portion of DNA and detecting signal from labeled probe.
XX
XX Example 4; Page 62; 126pp; English.
PS
XX The present invention relates to a method and apparatus for transgenic
CC and targeted mutagenesis screening of genomic DNA. The method comprises
CC depositing genomic DNA on a substrate, adding at least one labelled probe
CC specific for a portion of the genomic DNA, and detecting the signal from
CC the probe. The invention also provides a system for screening DNA for a
CC designated genetic sequence. The system includes a computer having a
CC processor, memory, web browser and an automatic screening device that
CC analyses samples of genomic DNA for the designated sequence. The method
CC is useful for detecting a designated genetic sequence in a sample of
CC genomic DNA. The method is useful for rapid identification of an
CC organism, whose genome possesses specific genetic sequences that exist
CC endogenously or has been modified, mutated or genetically engineered. The
CC method is more accurate, faster and is a high volume transgenic and
CC targeted mutagenesis screening method. The screening results are provided
CC to a researcher more quickly than by the prior art methods. The present
CC sequence represents a Fam modified probe used in the methods of the
CC present invention
XX
SQ Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 4.7e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1593 CGTGGTGGACACCGAGTTCT 1612
DB 20 CGTGGTGGACACCGAGTTAT 1
RESULT 272
ABK50568/C
ID ABK50568 standard; DNA; 20 BP.
XX
AC ABK50568;
XX
DT 30-JUL-2002 (first entry)
XX
DE Mouse genomic DNA marker #4.
XX
XX Method for screening genomic DNA; target sequence; transgenic screening;
XX organism identification; targeted mutagenesis screening method; mouse;
XX DNA marker; ds.
XX
XX Mus sp.
XX
XX WO200220842-A1.
XX
XX 14-MAR-2002.
XX
XX 04-SEP-2001; 2001WO-US027404.
XX
XX
XX 06-SEP-2000; 2000US-0230371P.

PR 04-SEP-2001; 2001US-00230371.
XX
PA (HODG/) HODGE T A.
XX
PI Hodge TA;
XX
XX WPI; 2002-371884/40.
XX
PT Detecting designated genetic sequence in genomic DNA sample, comprises
PT depositing genomic DNA on substrate, adding labeled probe specific for
PT portion of DNA and detecting signal from labeled probe.
XX
XX Claim 9; Page 41; 126pp; English.
XX
XX The present invention relates to a method and apparatus for transgenic
CC and targeted mutagenesis screening of genomic DNA. The method comprises
CC depositing genomic DNA on a substrate, adding at least one labelled probe
CC specific for a portion of the genomic DNA, and detecting the signal from
CC the probe. The invention also provides a system for screening DNA for a
CC designated genetic sequence. The system includes a computer having a
CC processor, memory, web browser and an automatic screening device that
CC analyses samples of genomic DNA for the designated sequence. The method
CC is useful for detecting a designated genetic sequence in a sample of
CC genomic DNA. The method is useful for rapid identification of an
CC organism, whose genome possesses specific genetic sequences that exist
CC endogenously or has been modified, mutated or genetically engineered. The
CC method is more accurate, faster and is a high volume transgenic and
CC targeted mutagenesis screening method. The screening results are provided
CC to a researcher more quickly than by the prior art methods. The present
CC sequence represents a mouse genomic DNA marker used in the methods of the
CC present invention
XX
SQ Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 4.7e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1593 CGTGGTGGACACCGAGTTCT 1612
DB 20 CGTGGTGGACACCGAGTTAT 1
RESULT 273
ABS68931/C
ID ABS68931 standard; DNA; 20 BP.
XX
AC ABS68931;
XX
DT 20-NOV-2002 (first entry)
XX
DE Human RecQ protein-like 4 (RECQL4) DNA antisense oligonucleotide #74.
XX
XX Human; RecQ protein-like 4; RECQL4; ss; chromosome 8q24; infection;
XX inflammation; tumour formation; cancer; cytostatic; antiinflammatory;
XX antimicrobial; antisense therapy; antisense oligonucleotide.
XX
XX Homo sapiens.
XX
XX US6436706-B1.
XX
XX 20-AUG-2002.
XX
XX 23-FEB-2001; 2001US-00792594.
XX
XX 23-FEB-2001; 2001US-00792594.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Ward DT, Watt AT;
XX
XX WPI; 2002-689941/74.
XX

CC have antiarthritic and antiinflammatory activity, can act as act as
 CC kinase inhibitors. The antisense compound is useful for preparing a
 CC composition for diagnosing, treating or preventing inflammatory diseases,
 CC e.g. rheumatoid arthritis or for use in antisense gene therapy. This
 CC sequence represents an antisense oligonucleotide used in a method to
 CC inhibit p38 MAPK
 XX
 SQ Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 4.7e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 764 TGCTCAAGCACTCAACAC 783
 DB 20 TGCTCAAGCACTCAAGCAC 1
 RESULT 276
 ID ABZ59542/c
 XX ABZ59542 standard; DNA; 20 BP.
 AC ABZ59542;
 XX
 DT 17-APR-2003 (first entry)
 XX
 DE Mouse src-c chimeric phosphorothioate oligonucleotide SEQ ID NO:163.
 XX
 KW Mouse; src-c; tyrosine kinase; src-c inhibitor; cytostatic; osteopathic;
 KW antiinflammatory; antibacterial; antisense therapy; vaccine; cancer;
 KW antisense oligonucleotide; aberrant bone remodeling; breast cancer;
 KW hyperproliferative disorder; pancreatic cancer; lung cancer; tumour;
 KW ovarian cancer; oesophageal cancer; neuroblastoma; retinoblastoma;
 KW Kaposi's sarcoma; infection; inflammation; tumour formation;
 KW phosphorothioate; ss.
 XX
 OS Mus musculus.
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FH modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages"
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyl gapmer (2'-MOE wing)"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyl gapmer (2'-MOE wing)"
 FT
 XX WO200295053-A2.
 PN
 XX
 XX 28-NOV-2002.
 PD
 XX
 XX 16-MAY-2002; 2002WO-US015684.
 PF
 XX
 XX 18-MAY-2001; 2001US-00860473.
 PR
 XX
 XX (ISIS-) ISIS PHARM INC.
 PA
 XX
 XX Bennett FC, Watt AT;
 PI
 XX
 XX WPI; 2003-120806/11.
 DR
 XX
 XX New antisense oligonucleotides targeted to nucleic acids encoding src-c,
 PT useful for diagnosing, treating or preventing diseases associated with
 PT the expression of src-c, e.g. cancer or inflammation, and in research
 PT applications.
 PT
 XX
 XX Claim 3; Page 93; 137pp; English.

XX
 CC The present invention describes a compound (I) that is 8-50 nucleobases
 CC in length targeted to a nucleic acid molecule encoding a 5'UTR, 3'UTR,
 CC coding region, intron region, exon region, stop codon, intron:exon
 CC junction, exon:exon junction, or 5' mRNA variant of src-c, and which
 CC specifically hybridises with and inhibits the expression of src-c. (I)
 CC have cytostatic, antiinflammatory, osteopathic and antibacterial
 CC activities, and can be used in antisense therapy and in vaccines. The
 CC antisense compounds (I) can be used for modulating the expression of src-
 CC c and for treating diseases or conditions associated with expression of
 CC src-c, e.g. aberrant bone remodeling or hyperproliferative disorders,
 CC particularly cancer, such as breast cancer, pancreatic cancer, lung
 CC cancer, ovarian cancer, oesophageal cancer, neuroblastoma, retinoblastoma
 CC or Kaposi's sarcoma. (I) are also useful for diagnostics, therapeutics,
 CC prophylaxis, e.g. to prevent or delay infection, inflammation or tumour
 CC formation, as research reagents and kits, and in distinguishing between
 CC functions of various members of a biological pathway. The present
 CC sequence represents a mouse src-c antisense chimeric phosphorothioate
 CC oligonucleotide, which is used in an example from the present invention
 XX
 SQ Sequence 20 BP; 6 A; 8 C; 5 G; 1 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 4.7e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1028 TGGCTGACTTTGGCTGCCC 1047
 DB 20 TGGCGGACTTTGGGTGGCC 1
 RESULT 277
 ID AAD52909/c
 XX AAD52909 standard; DNA; 20 BP.
 AC AAD52909;
 XX
 DT 14-MAY-2003 (first entry)
 XX
 DE Human TTYH2 intron C amplifying reverse PCR primer.
 XX
 KW Human; tweety homologue 2; TTYH2; therapy; cancer; tumour; cytostatic;
 KW diagnostic marker; PCR; primer; ss.
 XX
 CS Homo sapiens.
 XX
 XX WO200292629-A1.
 PN
 XX 21-NOV-2002.
 PD
 XX
 XX 14-MAY-2002; 2002WO-AU000591.
 PF
 XX
 XX 14-MAY-2001; 2001AU-00004971.
 PR
 XX
 XX (UYQU-) UNIV QUEENSLAND TECHNOLOGY.
 PA
 XX
 XX Clements JA;
 PI
 XX
 XX WPI; 2003-129264/12.
 DR
 XX
 XX New human tweety homolog 2 polypeptides and polynucleotides, useful for
 PT producing an antigen-binding molecule that is immuno-interactive with the
 PT polypeptide or as diagnostic markers for cancers.
 PT
 XX
 XX Example 4; Page 92; 176pp; English.
 PS
 XX
 CC The invention relates to human tweety homologue 2 (TTYH2) polypeptide and
 CC polynucleotide sequence. TTYH2 is useful for producing an antigen-binding
 CC molecule that is immuno-interactive with the polypeptide. The agent is
 CC useful for manufacturing a medicament for restoring a normal level and/or
 CC functional activity of TTYH2 expression in a patient, and for treating or
 CC preventing cancer or tumour. TTYH2 sequences may also be used to provide
 CC both drug targets and regulators to promote or inhibit one or more

CC activities, and to provide diagnostic markers for cancers. The present
CC sequence is a PCR primer used for amplifying human ITH2 gene intron
XX
SQ Sequence 20 BP; 2 A; 7 C; 6 G; 5 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 4.7e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 858 GGACCTGAGCAGTACCTCG 877
Db 20 GGACCTGAGCAGCACCCTGG 1
RESULT 278
ACF04494/C
ID ACF04494 standard; DNA; 20 BP.
XX ACF04494;
XX
DT 04-DEC-2003 (first entry)
XX
DE Real time PCR targeting IL-1ra PCR primer F43.
XX
XX Nucleic acid level determination; PCR; primer; probe; DNA quantification;
KW gene therapy; immunosuppressive; anti-HIV; antiarthritic;
KW neuroprotective; cytostatic; antiallergic; ss.
XX
OS Unidentified.
XX
XX WO2003060119-A2.
XX
XX 24-JUL-2003.
XX
XX 20-JAN-2003; 2003WO-EP000493.
XX
XX 18-JAN-2002; 2002EP-00447009.
XX
XX (ULBR) UNIV LIBRE BRUXELLES.
XX
XX Stordeur P, Goldman M;
XX WPI; 2003-598531/56.
XX
XX Quantifying in vivo RNA from a biological sample for producing a
PT medicament for treating immune related disease by determining in vivo
PT levels of transcripts using nucleic acid/reverse transcription-PCR
PT reagent mix in an automated setup.
XX
XX Disclosure; Page 44; 83pp; English.
XX
CC The present invention relates to a method of quantifying in vivo RNA from
CC a biological sample. This involves collecting the biological sample in a
CC tube comprising a compound inhibiting RNA degradation and/or gene
CC induction, forming a precipitate comprising nucleic acids, separating the
CC precipitate from the supernatant, dissolving the precipitate using a
CC buffer, forming a suspension, isolating nucleic acids from the suspension
CC using an automated device, dispersing or distributing a reagent mix for
CC reverse transcription (RT)-PCR using an automated device, dispersing or
CC distributing the nucleic acids isolated within the dispersed reagent mix
CC using an automated device and determining the in vivo levels of
CC transcripts using the nucleic acid and RT-PCR reagent mix of the previous
CC step in an automated setup. The method is useful for monitoring or
CC detecting changes in in vivo nucleic acids levels in a biological agent
CC present, such as eukaryotic or prokaryotic cells, viruses or phages in a
CC biological sample or for producing a medicament for treating immune
CC related disease, e.g., autoimmunity, rheumatoid arthritis, multiple
CC sclerosis, cancer, immunodeficiencies such as AIDS, allergy, graft
CC rejection or Graft versus Host Disease. The present sequence is a PCR
CC primer/probe used in the exemplification of the invention
XX
SQ Sequence 20 BP; 1 A; 9 C; 1 G; 9 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 4.7e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 713 GACTGGAACATGAAGAGGGG 732
Db 20 GAATGGAACAGGAGGAGGAG 1
RESULT 279
ADB79146/C
ID ADB79146 standard; DNA; 20 BP.
XX ADB79146;
XX
DT 04-DEC-2003 (first entry)
XX
DE Matrix metalloproteinase 1 antisense oligonucleotide, SEQ ID No 60.
XX
XX antisense; modulating; expression; matrix metalloproteinase 1; MMP1;
KW hyperproliferative disorder; cancer; inflammatory disorder;
KW atherosclerosis; MMP1 inhibitor; cytostatic; antiinflammatory;
KW antiarteriosclerotic; ss; human.
XX
XX Synthetic.
OS Homo sapiens.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base
FT /note= "OTHER= Nucleotides 1-5 and 15-20 are 2'-O-
FT methoxyethyl's (2-MOE)'s separated by a gap region of 2'-
FT deoxynucleotides. Nucleotides 1-20 have a
FT phosphorothioate backbone. All cytidine residues are 5-
FT methylcytidines"
XX
XX WO2003033659-A2.
XX
XX 24-APR-2003.
XX
XX 15-OCT-2002; 2002WO-US032940.
XX
XX 17-OCT-2001; 2001US-00035485.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker BF, Cowsett LM;
XX
XX MPI; 2003-393515/37.
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
PT nucleic acid encoding matrix metalloproteinase 1 (MMP1), useful for
PT treating a disease/condition associated with MMP1, such as
PT hyperproliferative disorder.
XX
XX Claim 3; Page 74; 99pp; English.
XX
CC The invention relates to antisense compounds, compositions and methods
CC used for modulating the expression of matrix metalloproteinase 1 (MMP1).
CC Specifically claimed, are antisense oligonucleotides capable of
CC modulating the expression of MMP1, and which comprise any of the 55
CC sequences of 20 bp, fully defined in the specification. The compound,
CC composition and methods are useful for treating a disease or condition
CC associated with MMP1, such as hyperproliferative disorder, e.g. cancer,
CC inflammatory disorder or atherosclerosis, by inhibiting the expression of
CC MMP1. They are also useful in research and diagnostics for modulating the
CC expression of MMP1. The antisense compounds can act as MMP1 inhibitors
CC and have the following activities: cytostatic, antiinflammatory, and
CC antiarteriosclerotic. This polynucleotide sequence represents one of the
CC antisense compounds used for modulating the expression of matrix
CC metalloproteinase 1 of the invention.
XX

SQ Sequence 20 BP; 4 A; 5 C; 4 G; 7 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 4.7e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 962 AGAGGTGCTACCGAGAC 981
DB 20 AGATGTGCTACCGATAC 1
RESULT 280
ADD19339/c
ID ADD19339 standard; DNA; 20 BP.
XX
AC ADD19339;
XX
DT 15-JAN-2004 (first entry)
XX
DE Leptin gene-specific PCR primer #2.
XX
KW feline; cat; leptin; leptin inhibitor; obesity; PCR; ss; primer.
XX
OS Unidentified.
XX
PN JP2003038187-A.
XX
PD 12-FEB-2003.
XX
PF 31-JUL-2001; 2001JP-00230711.
XX
PR 31-JUL-2001; 2001JP-00230711.
XX
PA (MOMI) MORINAGA & CO LTD.
XX
DR WPI; 2003-527653/50.
XX
PT Novel feline leptin polypeptide encoded by a feline ob gene which is
PT related to obesity in cats, useful for diagnosing and treating obesity.
XX
PS Example; SEQ ID NO 6; 18pp; Japanese.
XX
CC The invention comprises the amino acid and coding sequences of feline
CC leptin proteins. The DNA and protein sequences of the invention are
CC useful for screening for a compound which inhibits the activity of
CC leptin. The DNA and protein sequences of the are also useful for
CC diagnosing and treating obesity. The present DNA sequence represents a
CC PCR primer that was used in an example of the invention.
XX
SQ Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 4.7e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1075 TACTCCATGAGGTGGTGAC 1094
DB 20 TACTCCACAGAGGTGGTGGC 1
RESULT 281
ADE71316/c
ID ADE71316 standard; DNA; 20 BP.
XX
AC ADE71316;
XX
DT 29-JAN-2004 (first entry)
XX
DE PCR primer #2 used to illustrate microorganism breeding method.
XX
KW Microorganism; PCR; primer; ss.
XX
OS Synthetic.

XX JP2003047477-A.
PN
XX 18-FEB-2003.
PD
XX 07-AUG-2001; 2001JP-00239331.
PF
XX 07-AUG-2001; 2001JP-00239331.
PR
XX (MITU) MITSUBISHI CHEM CORP.
PA
XX WPI; 2003-508704/48.
DR
XX
XX Breeding microorganism cell whose host character is changed by expression
PT of introduced insertion sequence, by introducing the sequence into the
PT genome and is transformed using DNA which has the insertion sequence.
XX
PS Example 3; SEQ ID NO 2; 20pp; Japanese.
XX
CC The present invention relates to a method (M1) for breeding microorganism
CC cells whose host character is changed by the expression of the introduced
CC insertion sequence. The method involves introducing the insertion
CC sequence into the genome and is transformed using DNA which has the
CC insertion sequence. The present sequence is a PCR primer, which was used
CC in an example from the invention.
XX
SQ Sequence 20 BP; 4 A; 8 C; 5 G; 3 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 4.7e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1464 CAGTCTGGGGGAGCGGATCC 1483.
DB 20 CAGTCTGGGGGAGCGGATCC 1
RESULT 282
AAQ22395/c
ID AAQ22395 standard; DNA; 21 BP.
XX
AC AAQ22395;
XX
DT 09-JUL-1992 (first entry)
XX
DE DNA for modulating effects of cytomegalovirus infection.
XX
KW IE1; IE2; DNA polymerase; CMV; prophylactic; therapeutic;
KW antisense inhibition; gene expression; intron/exon boundary; ss.
XX
OS Cytomegalovirus.
XX
XX WO9203456-A.
PN
XX 05-MAR-1992.
PD
XX 14-AUG-1991; 91WO-U0005815.
PF
XX 16-AUG-1990; 90US-00568366.
PR
XX (ISIS-) ISIS PHARM INC.
PA
XX Anderson KP, Draper KG;
PI
XX WPI; 1992-096819/12.
DR
XX
XX Oligo-nucleotide(s) for modulating effects of cytomegalovirus infections
PT - which can be hybridised with portion of RNA or DNA derived from IE1,
PT IE2 or DNA genes of cytomegalovirus.
XX
XX Disclosure; Table 2; 44pp; English.
PS
XX The oligonucleotide was synthesised to be complementary to the IE2 NUC

CC SIG 2 of human cytomegalovirus. This site is known to control mRNA
CC stability, processing and/or translational efficiency. The synthetic
CC oligomer can hybridise to the native DNA polymerase of cytomegalovirus
CC and modulate the activity of CMV. The oligomer can be used
CC prophylactically or therapeutically to reduce the severity of disease
CC caused by CMV. It specifically inhibits replication of CMV by antisense
CC inhibition of gene expression. See also AAQ22353-400
XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 130 CGGATGAAGAAGATCAACG 149
||| ||||| ||||| |||||
Db 21 CGCAAGAAGAAGACCAACG 2

RESULT 283

AAQ22372
ID AAQ22372 standard; DNA; 21 BP.

XX AC AAQ22372;

XX DT 09-JUL-1992 (first entry)

XX DE DNA for modulating effects of cytomegalovirus infection.

XX IE1; IE2; DNA polymerase; CMV; prophylactic; therapeutic;
XX antisense inhibition; gene expression; intron/exon boundary; ss.

XX Cytomegalovirus.

XX WO9203456-A.

XX PD 05-MAR-1992.

XX PF 14-AUG-1991; 91WO-U0005815.

XX PR 16-AUG-1990; 90US-00568366.

XX (ISIS-) ISIS PHARM INC.

XX PI Anderson KP, Draper KG;

XX DR WPI; 1992-096819/12.

XX PT Oligo-nucleotide(s) for modulating effects of cytomegalovirus infections
XX which can be hybridised with portion of RNA or DNA derived from IE1,
XX IE2 or DNA genes of cytomegalovirus.

XX PS Claim 11; Page 36; 44pp; English.

XX The oligonucleotide was synthesised to be complementary to the IE2 NUC
XX SIG-2 region of human cytomegalovirus. This site is known to control mRNA
XX stability, processing and/or translational efficiency. The synthetic
XX oligomer can hybridise to the native DNA polymerase of cytomegalovirus
XX and modulate the activity of CMV. The oligomer can be used
XX prophylactically or therapeutically to reduce the severity of disease
XX caused by CMV. It specifically inhibits replication of CMV by antisense
XX inhibition of gene expression. See also AAQ22353-400

SQ Sequence 21 BP; 10 A; 5 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 130 CGGATGAAGAAGATCAACG 149
||| ||||| ||||| |||||
Db 1 CGCAAGAAGAAGACCAACG 20

RESULT 284

AAT11965/c

XX AAT11965 standard; DNA; 21 BP.

XX AC AAT11965;

XX DT 25-MAR-2003 (revised)

XX DT 13-MAR-1996 (first entry)

XX Antisense oligonucleotide (ISIS 2922) complementary to human CMV.

XX antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis;
XX intermediate early complex; IE1; IE2; DNA polymerase gene; ss.

XX Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..21

FT /*tag= a

FT /note= "phosphorothioate backbone"

XX US5442049-A.

XX PN 15-AUG-1995.

XX PD 25-JAN-1993; 93US-00009263.

XX PF 19-NOV-1992; 92US-00927506.

XX PR (ISIS-) ISIS PHARM INC.

XX PI Baker B, Draper K, Anderson K;

XX WPI; 1995-292538/38.

XX New oligo-nucleotide inhibits cytomegalovirus replication - by binding to
XX a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and
XX treatment of CMV diseases.

XX Claim 1; Col 13-14; 66pp; English.

XX This is a claimed antisense oligonucleotide (ON) which when tested for
XX activity against cytomegalovirus (CMV) showed greater than 90% inhibition
XX of virus at a concentration of 5 microm. The target of this ON is
XX nucleotides 170120-141 of the intermediate early 2 (IE2) nuclear
XX localisation signal 2 of the human CMV genome. Antisense ONs targeting
XX CMV DNA or RNA coding for the IE1, IE2 or DNA polymerase proteins have
XX been shown to be effective in therapy, prophylaxis and diagnosis of CMV
XX infection. The ONs may be modified to reduce nuclease resistance and to
XX increase their efficacy. Modifications include phosphorothioate
XX backbones, alkyl and halogen- substituted sugar moieties at the 2',
XX position. (Updated on 25-MAR-2003 to correct PF field.)

SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 130 CGGATGAAGAAGATCAACG 149
||| ||||| ||||| |||||
Db 21 CGCAAGAAGAAGACCAACG 2

RESULT 285

AAT12031

XX AAT12031 standard; DNA; 21 BP.

XX AC AAT12031;

XX DT 25-MAR-2003 (revised)

XX DT 13-MAR-1996 (first entry)


```

XX CMV IE2 target gene sequence for antisense oligonucleotides.
DE antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis;
KW intermediate early complex; IE1; IE2; DNA polymerase gene; ss.
XX Synthetic.
XX US5442049-A.
XX 15-AUG-1995.
XX 25-JAN-1993; 93US-00009263.
XX 19-NOV-1992; 92US-00927506.
XX (ISIS-) ISIS PHARM INC.
XX Baker B, Draper K, Anderson K;
XX WPI; 1995-292538/38.
XX New oligo-nucleotide inhibits cytomegalovirus replication - by binding to
PT a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and
PT treatment of CMV diseases.
XX Disclosure; Col 7-8; 66pp; English.
XX AAT12008-31 are selected target sites of the cytomegalovirus (CMV) genome
CC suitable for targeting antisense oligonucleotides (ONS). This target
CC sequence covers part of the nuclear localisation signal 2 of intermediate
CC early (IE) complex 2 gene. Antisense ONS targeting CMV DNA or RNA coding
CC for the IE1, IE2 or DNA polymerase proteins have been shown to be
CC effective in therapy, prophylaxis and diagnosis of CMV infection. The ONS
CC may be modified to reduce nuclease resistance and to increase their
CC efficacy. Modifications include phosphorothioate backbones, alkyl and
CC halogen-substituted sugar moieties at the 2' position. (Updated on 23-MAR
XX -2003 to correct PF field.)
XX
SQ Sequence 21 BP; 10 A; 5 C; 6 G; 0 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAGAGAGATCAACG 149
Db 1 CGCAGAGAGAGAGATCAACG 20

RESULT 286
AAT01647/c
ID AAT01647 standard; DNA; 21 BP.
XX
AC AAT01647;
XX
DT 17-DEC-1995 (first entry)
XX
DE Peptide nucleic acid targeting CMV IE2 nuc sig 2.
XX
KW peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;
KW antiviral; diagnostic; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT misc_feature 1..21
FT /tag= a
FT /note= "at least one (and preferably all) of the backbone
FT subunits are composed of amide units, so that the
FT oligomer consists of the nucleobases attached covalently
FT to a polyamide backbone"
XX

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PN WO9504748-A1.
XX
PD 16-FEB-1995.
XX
PF 09-AUG-1994; 94WO-US009039.
XX
PR 09-AUG-1993; 93US-00104438.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Anderson KP, Crooke ST, Mirabelli CK, Ecker DJ, Cowsert LM;
XX
XX WPI; 1995-090841/12.
XX
DR New peptide nucleic acid oligomers hybridisable to cytomegalovirus or
XX papillomavirus - are stable anti-sense molecules with high affinity for
XX single stranded DNA, used for treating infections.
XX
XX Claim 2; Page 43; 65pp; English.
XX
XX New oligomers are claimed which (A) have at least one peptide nucleic
CC acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, 5'
CC untranslated region, intron/exon (I/E) junction or coding sequence of
CC cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or
CC hybridisable to the E, E2, E4, E5, E6, E7, L1 or L2 reading frames of a
CC papillomavirus. The PNAs can be used to target RNA and single stranded
CC DNA (ssDNA) to produce antisense-type gene regulation moieties. Hence
CC they may be used therapeutically for modulating cytomegalovirus and
CC papillomavirus processes and also as diagnostics (e.g., as probes for
CC specific mRNAs). PNA oligomers have high affinity for complementary
CC single stranded DNA. They are also able to form triple helices in which a
CC first PNA strand binds with RNA or ssDNA and a second PNA strand binds
CC with the resulting double helix or with the first PNA strand. The PNAs
CC possess no significant charge and are water soluble, which facilitates
CC cellular uptake. Further, since they contain amides of non-biological
CC amino acids, they are biostable and resistant to enzymatic degradation by
CC proteases. The present sequence targets CMV IE2 nuclear localisation
XX signal 2
XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAGAGAGATCAACG 149
Db 21 CGCAGAGAGAGAGATCAACG 2

RESULT 287
AAT01703
ID AAT01703 standard; DNA; 21 BP.
XX
AC AAT01703;
XX
DT 17-DEC-1995 (first entry)
XX
DE Peptide nucleic acid targeting CMV IE2 nuc sig 2.
XX
KW peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;
KW antiviral; diagnostic; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT misc_feature 1..21
FT /tag= a
FT /note= "at least one (and preferably all) of the backbone
FT subunits are composed of amide units, so that the
FT oligomer consists of the nucleobases attached covalently
FT to a polyamide backbone"
XX

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FN WO9504748-A1.
XX
XX 16-FEB-1995.
XX
XX 09-AUG-1994; 94WO-US009039.
XX
XX 09-AUG-1993; 93US-00104438.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Anderson KP, Crooke ST, Mirabelli CK, Ecker DJ, Cowsett LM;
XX WPI; 1995-090841/12.
XX
XX New peptide nucleic acid oligomers hybridisable to cytomegalovirus or
XX papilloma-virus - are stable anti-sense molecules with high affinity for
XX single stranded DNA, used for treating infections.
XX
XX Claim 2; Page 45; 65pp; English.
XX
XX New oligomers are claimed which (A) have at least one peptide nucleic
XX acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, 5',
XX untranslated region, intron/exon (I/E) junction or coding sequence of
XX cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or
XX hybridisable to the E, E2, E4, E5, E6, E7, L1 or L2 reading frames of a
XX papillomavirus. The PNAs can be used to target RNA and single stranded
XX DNA (ssDNA) to produce antisense-type gene regulation motifs. Hence
XX they may be used therapeutically for modulating cytomegalovirus and
XX papillomavirus processes and also as diagnostics (e.g., as probes for
XX specific mRNAs). PNA oligomers have high affinity for complementary
XX single stranded DNA. They are also able to form triple helices in which a
XX first PNA strand binds with RNA or ssDNA and a second PNA strand binds
XX with the resulting double helix or with the first PNA strand. The PNAs
XX possess no significant charge and are water soluble, which facilitates
XX cellular uptake. Further, since they contain amides of non-biological
XX amino acids, they are biostable and resistant to enzymatic degradation by
XX proteases. The present sequence targets CMV IE2 nuclear localisation
XX signal 2
XX
XX Sequence 21 BP; 10 A; 5 C; 6 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Oy 130 CGGATGAAGAAGATCAACG 149
Db 1 CGCAGAGAGAGACCAACG 20
||| ||||| |||||
1 CGCAGAGAGAGACCAACG 20

RESULT 288
AAT05682/c
ID AAT05682 standard; DNA; 21 BP.
XX
XX AC AAT05682;
XX
XX 06-JUN-1996 (first entry)
XX
XX Antisense oligonucleotide ISIS 2922 targetted to CMV IE2.
XX
XX Antisense oligonucleotide; ISIS 2922; cytomegalovirus; CMV;
XX immediate early 2 mRNA; IE2; human; HCMV; CMV retinitis; blindness; HIV;
XX ss.
XX
XX Synthetic.
XX
XX WO9528941-A1.
XX
XX 02-NOV-1995.
XX
XX 24-APR-1995; 95WO-US005007.
XX
XX 26-APR-1994; 94US-00233711.
XX

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XX PA (ISIS-) ISIS PHARM INC.
XX
XX PI Draper KG, Chapman SK, Kisner DL;
XX
XX WPI; 1995-382835/49.
XX
XX Anti-sense oligo-nucleotide against the CMV immediate early 2 gene -
XX useful for treatment of cytomegalovirus infections, esp. retinitis.
XX
XX Claim 1; Page 24; 32pp; English.
XX
XX This sequence represents an antisense oligonucleotide ISIS 2922 which is
XX targetted to the cytomegalovirus (CMV) immediate early 2 (IE2) mRNA. The
XX IE2 protein is capable of transcriptionally activating proteins of
XX cellular and viral origin and is thought to be one of the "master
XX switches" of human CMV (HCMV) gene expression. Therefore disruption of
XX the IE2 mRNA will lead to a reduction in HCMV infectivity. This
XX oligonucleotide may esp. be used in a human medicine to halt progression
XX of CMV retinitis which can cause blindness in immunocompromised, e.g.
XX HIV, patients. It has an additive effect with ganciclovir or foscarnet,
XX and is not adversely affected by AZT or ddC
XX
XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Oy 130 CGGATGAAGAAGATCAACG 149
Db 21 CGCAGAGAGAGACCAACG 2
||| ||||| |||||
21 CGCAGAGAGAGACCAACG 2

RESULT 289
AAT07112/c
ID AAT07112 standard; cDNA; 21 BP.
XX
XX AC AAT07112;
XX
XX 25-JUN-1996 (first entry)
XX
XX IE2 translational start inhibitor IE (ISIS).
XX
XX Inhibitor; cytomegalovirus; human; antisense oligonucleotide; HCMV;
XX regulatory protein; general transcriptional activator; DNA replication;
XX orilyt-dependent viral replication; phosphorothioate linkage; CMV; IE2;
XX 2-O-methyl linkage; alkylphosphonate linkage; replication deficient;
XX immediate early; ss.
XX
XX Synthetic.
XX
XX WO9532213-A1.
XX
XX 30-NOV-1995.
XX
XX 19-MAY-1995; 95WO-US006160.
XX
XX 25-MAY-1994; 94US-00249386.
XX
XX (HYBR-) HYBRIDON INC.
XX
XX Pari GS;
XX
XX WPI; 1996-020525/02.
XX
XX Synthetic oligo:nucleotide(s) that hybridise to cytomegalovirus (CMV) DNA
XX - inhibit CMV gene expression, useful for treating or preventing human
XX CMV infection.
XX
XX Disclosure; Page 23; 64pp; English.
XX
XX AAT07089-T07112 represent antisense oligonucleotides directed against
XX

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CC regions of the human cytomegalovirus (HCMV) genome. This sequence targets
 CC the immediate early 2 (IE2) translational start site. All of the targeted
 CC genes are required for orylyt-dependent viral replication. These
 CC sequences therefore inhibit HCMV DNA replication by hybridising to these
 CC genes under normal physiological conditions. Preferably, these sequences
 CC are modified to contain at least 1 internucleotide linkage selected from
 CC phosphorothioate, 2'-O-methyl and alkylphosphonate linkages. As these
 CC sequences inhibit HCMV replication, they can be used in compositions to
 CC treat or prevent HCMV infection in a cell. The replication deficient CMV
 CC strains that can be produced using these sequences will be useful for the
 CC study of CMV in the absence of mutant strains
 XX

SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 5e+02; 3; Indels 0; Gaps 0;
 Matches 17; Conservative 0; Mismatches 0;

QY 130 CGGATGAGAGATCAACG 149

Db 21 CGCAGAGAGAGCGAACG 2

RESULT 290

AA36470/C
 ID AAX36470 standard; DNA; 21 BP.

AC AAX36470;

XX 06-JUL-1999 (first entry)

XX Chimeric 2'-O-methyl oligo for CMV replication inhibition.

XX RNaseH; RNA cleavage; DNA cleavage; hybridisation; protein kinase C gene;
 XX gene expression modulation; ras; raf; therapy; AIDS; atherosclerosis;
 XX infection; cell growth; ss.

XX Synthetic.

XX WO9730067-A1.

XX 21-AUG-1997.

XX 07-FEB-1997; 97WO-US002043.

XX 14-FEB-1996; 96US-0011620P.

XX (ISIS-) ISIS PHARM INC.

XX (NOVS) NOVARTIS AG.

XX Cook PD, Monia B, Altmann K, Martin P;

XX WPI; 1997-424968/39.

XX Oligo:nucleotide with RNaseH activity, which specifically hybridises to
 XX DNA or RNA - comprises 1st and 2nd sub:sequence(s) having 2'-O-CH2-CH2-O-
 XX CH3 and 2'-deoxy sugar moieties, useful for therapy or diagnosis.

XX Example 22; Page 47; 86pp; English.

XX This sequence is an example of an oligonucleotide of the invention, and
 CC is an inhibitor of CMV replication. The invention relates to
 CC oligonucleotides (A), which specifically hybridises to RNA or DNA,
 CC comprises a linear sequence of nucleotide units linked by phosphodiester
 CC or phosphorothioate linkages, comprising a first subsequence having 2'-O-
 CC CH2-CH2-O-CH3 sugar moieties and a second subsequence having 2'-deoxy
 CC sugar moieties. (A), which has RNaseH activity for cleaving a
 CC complementary strand, can be used to modulate the expression of ras, raf
 CC and protein kinase C genes, useful in the therapy of AIDS,
 CC atherosclerosis, bacterial or other infections, or to control aberrant
 CC cell growth in humans, animals or plants. (A) can also be used
 CC diagnostically, particularly when labelled, to detect overexpression of
 CC mRNA or expression of abnormal RNA, including imaging of tissue sections,

CC and as a research reagent. (A) has increased binding affinity for
 CC complementary strands (attributable to the 2'-O-CH2-CH2-O-CH3 sugar
 CC moiety), which overcomes the loss of affinity caused by altered intersugar
 CC links), and increased resistance to nuclease (from the modified links and
 CC the 2'-O-CH2-CH2-O-CH3 sugar moiety)

SQ Sequence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;

Best Local Similarity 85.0%; Pred. No. 5e+02; 3; Indels 0; Gaps 0;
 Matches 17; Conservative 0; Mismatches 0;

QY 130 CGGATGAGAGATCAACG 149

Db 21 CGCAGAGAGAGCGAACG 2

RESULT 291

AA36471/C

ID AAX36471 standard; DNA; 21 BP.

XX AAX36471;

XX 06-JUL-1999 (first entry)

XX Chimeric 2'-O-methyl oligo for CMV replication inhibition.

XX RNaseH; RNA cleavage; DNA cleavage; hybridisation; protein kinase C gene;
 XX gene expression modulation; ras; raf; therapy; AIDS; atherosclerosis;
 XX infection; cell growth; ss.

XX Synthetic.

XX WO9730067-A1.

XX 21-AUG-1997.

XX 07-FEB-1997; 97WO-US002043.

XX 14-FEB-1996; 96US-0011620P.

XX (ISIS-) ISIS PHARM INC.

XX (NOVS) NOVARTIS AG.

XX Cook PD, Monia B, Altmann K, Martin P;

XX WPI; 1997-424968/39.

XX Oligo:nucleotide with RNaseH activity, which specifically hybridises to
 XX DNA or RNA - comprises 1st and 2nd sub:sequence(s) having 2'-O-CH2-CH2-O-
 XX CH3 and 2'-deoxy sugar moieties, useful for therapy or diagnosis.

XX Example 22; Page 47; 86pp; English.

XX This sequence is an example of an oligonucleotide of the invention, and
 CC is an inhibitor of CMV replication. The invention relates to
 CC oligonucleotides (A), which specifically hybridises to RNA or DNA,
 CC comprises a linear sequence of nucleotide units linked by phosphodiester
 CC or phosphorothioate linkages, comprising a first subsequence having 2'-O-
 CC CH2-CH2-O-CH3 sugar moieties and a second subsequence having 2'-deoxy
 CC sugar moieties. (A), which has RNaseH activity for cleaving a
 CC complementary strand, can be used to modulate the expression of ras, raf
 CC and protein kinase C genes, useful in the therapy of AIDS,
 CC atherosclerosis, bacterial or other infections, or to control aberrant
 CC cell growth in humans, animals or plants. (A) can also be used
 CC diagnostically, particularly when labelled, to detect overexpression of
 CC mRNA or expression of abnormal RNA, including imaging of tissue sections,
 CC and as a research reagent. (A) has increased binding affinity for
 CC complementary strands (attributable to the 2'-O-CH2-CH2-O-CH3 sugar
 CC moiety), which overcomes the loss of affinity caused by altered intersugar
 CC links), and increased resistance to nuclease (from the modified links and
 CC the 2'-O-CH2-CH2-O-CH3 sugar moiety)

```
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAAAACG 149
DB 21 CGCAAGAGAGAGCAAAACG 2

RESULT 292
AAT49210/c
ID AAT49210 standard; DNA; 21 BP.
AC AAT49210;
XX
DT 02-JUL-2002 (revised)
DT 03-SEP-1997 (first entry)
XX
XX Phosphorothioate oligonucleotide ISIS-2922.
XX phosphorothioate; therapeutic; RNase H activity; ras; antisense;
XX inhibit translation; treating; hepatitis; inflammatory disease;
XX intercellular cell adhesion factor; ICAM-1; cytomegalovirus retinitis;
XX cancer; protein kinase C alpha; c-rai; Ha-ras; Ki-ras; AIDS; chiral;
XX thermodynamic stability; hepatitis C virus; ss.
XX Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..21
FT /*tag= a
FT /note= "phosphorothioate 3' to 5' linkages"
XX
XX MO9639154-A1.
XX
XX 12-DEC-1996.
XX
XX 05-JUN-1996; 96WO-US008757.
XX
XX 06-JUN-1995; 95US-00466692.
XX 06-JUN-1995; 95US-00467597.
XX 06-JUN-1995; 95US-00468447.
XX 06-JUN-1995; 95US-00468569.
XX 06-JUN-1995; 95US-00469851.
XX 06-JUN-1995; 95US-00470129.
XX 06-JUN-1995; 95US-00471966.
XX 06-JUN-1995; 95US-00471967.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Cook PD, Hoke G;
XX
XX WPI; 1997-042838/04.
XX
XX Sequence-specific oligo:nucleotide(s) useful in anti-sense therapy -
XX contain phosphorothioate linkages of high chiral purity, also used to
XX induce RNase H activity.
XX
XX Claim 1; Page 22; 49pp; English.
XX
XX AAT49204-14 are oligonucleotides where at least 75 % of the nucleoside
XX units are joined together by Sp or Rp phosphorothioate 3' to 5' linkages.
XX The oligonucleotides are useful therapeutically, e.g. by eliciting RNase
XX H activity ras antisense molecules to inhibit translation. Uses of the
XX oligos include treating hepatitis, inflammatory diseases mediated by
XX intercellular cell adhesion factor ICAM-1 and cytomegalovirus retinitis,
XX as well as treatment of cancers mediated by protein kinase C alpha, c-rai
XX kinase, Ha-ras or Ki-ras and treating AIDS. The sequence-specific
XX phosphorothioate oligonucleotides have substantially chirally pure
XX intersugar linkages which increase the thermodynamic stability of
XX heteroduplexes with target RNA and DNA. The present sequence is used in
```

```
CC the treatment of cytomegalovirus retinitis. (Updated on 02-JUL-2002 to
CC add missing PA field.)
XX
XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAAAACG 149
DB 21 CGCAAGAGAGAGCAAAACG 2

RESULT 293
AAT90843/c
ID AAT90843 standard; DNA; 21 BP.
XX
AC AAT90843;
XX
DT 14-APR-1998 (first entry)
XX
XX Anti-cytomegalovirus activity oligonucleotide ISIS 2922.
XX Human; cytomegalovirus; infection; antiviral; CMV; diagnosis;
XX chemical modification; phosphorothioate; ss.
XX Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..21
FT /*tag= a
FT /note= "Phosphorothioate linkages"
XX
XX MO9733992-A1.
XX
XX 18-SEP-1997.
XX
XX 14-MAR-1997; 97WO-US004235.
XX
XX 14-MAR-1996; 96US-00615801.
XX (HYBR-) HYBRIDON INC.
XX
XX Pari GS;
XX
XX WPI; 1997-479898/44.
XX
XX Modified oligo:nucleotide(s) with antiviral activity - used to treat or
XX prevent human cytomegalovirus infections.
XX
XX Disclosure; Page 7; 31pp; English.
XX
XX The present sequence represents a chemically modified oligonucleotide
XX with antiviral activity against human cytomegalovirus (CMV). The
XX chemically modified oligonucleotide is targeted to the UL36/37 gene of
XX CMV, and is used to treat or prevent human CMV infections. Also, the
XX chemically modified oligonucleotide can be used as a diagnostic probe to
XX detect CMV in clinical and experimental samples. Compared with known anti-
XX -CMV antisense molecules the chemically modified oligonucleotide is more
XX active, and more stable in vivo (allowing reduction in dose or less
XX frequent administration). It has better bioavailability to target organs
XX and tissues, and is less toxic (in trials, humans tolerated 2 hour
XX infusion of 0.5 mg/kg without toxicity)
XX
XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAAAACG 149
DB 21 CGCAAGAGAGAGCAAAACG 2
```

Db 21 CGCAAGAGAGAGCAACG 2

RESULT 294

AAV70321/C
ID AAV70321 standard; DNA; 21 BP.

XX AC AAV70321;

XX DT 05-FEB-1999 (first entry)

XX DE CMV gene oligomeric molecule probe #1.

XX KW CMV; human; cytomegalovirus; restenosis; angioplasty; atherectomy;

XX KW hybridisation; probe; oligomeric molecule; morpholino; HMCV;

XX KW phosphoramidate; ss.

XX OS Synthetic.

XX OS Human herpesvirus 5.

XX FH Key Location/Qualifiers

XX FT modified_base 1..21

XX FT /tag= a

XX FT /note= "preferably phosphoramidate linkages"

XX PN WO9846740-A1.

XX PD 22-OCT-1998.

XX PF 16-APR-1998; 98WO-US007866.

XX PR 17-APR-1997; 97US-0043274P.

XX PA (ANTI-) ANTIVIRALS INC.

XX PI Burger DR;

XX PI WPI; 1998-594572/50.

XX PT Inhibiting restenosis using oligonucleotide binding to cytomegalovirus

XX PT nucleic acid - useful for, e.g. preventing cytomegalovirus replication,

XX PT particularly after angioplasty or atherectomy.

XX PS Claim 8; Page 15; 24pp; English.

XX CC The present invention describes a method for inhibiting restenosis, in a

XX CC subject infected with cytomegalovirus (CMV) who has undergone, or is

XX CC undergoing, angioplasty or atherectomy. The method comprises

XX CC administering an oligonucleotide that hybridises to at least part of a

XX CC target sequence in a CMV gene. The oligonucleotide comprises purine and

XX CC pyrimidine bases that hybridise to corresponding bases in the target,

XX CC connected by 5-7 atom cyclic backbone groups. The oligonucleotides are

XX CC used to inhibit CMV replication, which is implicated in proliferation of

XX CC smooth muscle cells. They are particularly administered at the site of

XX CC injury but oral and parental administration are also contemplated.

XX CC Typically the dose is 1-25 (preferably 2-15) micro mole, or when included

XX CC in a delivery device, 30-3000 (preferably 300-1500) micro g/cm2 of

XX CC surface area being treated. Compared with sugar-based oligonucleotides,

XX CC the oligonucleotides of the present invention have higher affinity for

XX CC target RNA and better resistance to nucleases. Also the target-

XX CC oligonucleotide duplex formed is not unwound in the cell and since the

XX CC oligonucleotides are uncharged they enter cells more easily. Delivering

XX CC the oligonucleotides from balloon catheters or stents provides a high

XX CC concentration at the target site. AAV70321 to AAV70332 represent

XX CC specifically claimed examples of the oligonucleotides from the present

XX CC invention

XX SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

XX Query Match 0.9%; Score 15.2; DB 1; Length 21;

XX Best Local Similarity 85.0%; Pred. No. 5e+02;

XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

XX QY 130 CGCATGAGAGAGCAACG 149

XX 21 CGCAAGAGAGAGCAACG 2

Db 21 CGCAAGAGAGAGCAACG 2

RESULT 294

AAV70321/C
ID AAV70321 standard; DNA; 21 BP.

XX AC AAV70321;

XX DT 05-FEB-1999 (first entry)

XX DE CMV gene oligomeric molecule probe #1.

XX KW CMV; human; cytomegalovirus; restenosis; angioplasty; atherectomy;

XX KW hybridisation; probe; oligomeric molecule; morpholino; HMCV;

XX KW phosphoramidate; ss.

XX OS Synthetic.

XX OS Human herpesvirus 5.

XX FH Key Location/Qualifiers

XX FT modified_base 1..21

XX FT /tag= a

XX FT /note= "preferably phosphoramidate linkages"

XX PN WO9846740-A1.

XX PD 22-OCT-1998.

XX PF 16-APR-1998; 98WO-US007866.

XX PR 17-APR-1997; 97US-0043274P.

XX PA (ANTI-) ANTIVIRALS INC.

XX PI Burger DR;

XX PI WPI; 1998-594572/50.

XX PT Inhibiting restenosis using oligonucleotide binding to cytomegalovirus

XX PT nucleic acid - useful for, e.g. preventing cytomegalovirus replication,

XX PT particularly after angioplasty or atherectomy.

XX PS Claim 8; Page 15; 24pp; English.

XX CC The present invention describes a method for inhibiting restenosis, in a

XX CC subject infected with cytomegalovirus (CMV) who has undergone, or is

XX CC undergoing, angioplasty or atherectomy. The method comprises

XX CC administering an oligonucleotide that hybridises to at least part of a

XX CC target sequence in a CMV gene. The oligonucleotide comprises purine and

XX CC pyrimidine bases that hybridise to corresponding bases in the target,

XX CC connected by 5-7 atom cyclic backbone groups. The oligonucleotides are

XX CC used to inhibit CMV replication, which is implicated in proliferation of

XX CC smooth muscle cells. They are particularly administered at the site of

XX CC injury but oral and parental administration are also contemplated.

XX CC Typically the dose is 1-25 (preferably 2-15) micro mole, or when included

XX CC in a delivery device, 30-3000 (preferably 300-1500) micro g/cm2 of

XX CC surface area being treated. Compared with sugar-based oligonucleotides,

XX CC the oligonucleotides of the present invention have higher affinity for

XX CC target RNA and better resistance to nucleases. Also the target-

XX CC oligonucleotide duplex formed is not unwound in the cell and since the

XX CC oligonucleotides are uncharged they enter cells more easily. Delivering

XX CC the oligonucleotides from balloon catheters or stents provides a high

XX CC concentration at the target site. AAV70321 to AAV70332 represent

XX CC specifically claimed examples of the oligonucleotides from the present

XX CC invention

XX SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

XX Query Match 0.9%; Score 15.2; DB 1; Length 21;

XX Best Local Similarity 85.0%; Pred. No. 5e+02;

XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

XX QY 130 CGCATGAGAGAGCAACG 149

XX 21 CGCAAGAGAGAGCAACG 2

```

D5      21 CGCAAGAGAAGACAAACG 2
|||||
RESULT 296
AAV62909
ID AAV62909 standard; DNA; 21 BP.
XX AC
XX AAV62909;
XX DT
XX 13-JAN-1999 (first entry)
XX DE
XX Human galactokinase cDNA PCR primer #3.
XX DE
XX Galactokinase; human; mutation; detection; diagnosis; treatment;
XX KW deficiency: PCR primer; ss.
XX WW
XX Synthetic.
XX OS Homo sapiens.
XX OS
XX US5830649-A.
XX PN
XX XX
XX PD 03-NOV-1998.
XX PF
XX FF 26-MAY-1995; 95US-00451778.
XX PR 26-MAY-1995; 95US-00451778.
XX PR
XX PA (SMIK ) SMITHKLINE BEECHAM CORP.
XX XX
XX PI Bergama DJ, Stambolian DE;
XX PI WPI; 1998-609232/51.
XX DR
XX PT Detection of galactokinase mutations - based on comparison with wild-type
XX PT gene sequence or altered galactokinase activity.
XX PS Example 1; Col 35-36; 31pp; English.
XX CC
XX CC AAV62907-V62927 are PCR primers used in the amplification of a novel
XX CC human galactokinase. This protein is used in a method to detect
XX CC galactokinase mutations. This protein and its encoding nucleic acid can
XX CC be used in methods allowing the detection, diagnosis and treatment of
XX CC human galactokinase deficiency
XX CC
SQ Sequence '21 BP; 3 A; 9 C; 7 G; 2 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0
Qy 927 CCAGCTGCTCCGTGGCCTGG 946
||| ||| ||| ||| ||| ||| ||| ||| |||
Db 2 CCAGCAGCTCCGCACCCTGG 21

RESULT 297
AAV28268/c
ID AAV28268 standard; DNA; 21 BP.
XX AC
XX AAV28268;
XX XX
XX DT 08-OCT-1998 (first entry)
XX DE
XX Antisense oligonucleotide to Cytomegalovirus.
XX DE
XX Purification; oligonucleotide; matrix; affinity unit; Cytomegalovirus;
XX KW affinity purification; antisense; influenza virus; CMV; ss.
XX XX
XX Synthetic.
XX OS Cytomegalovirus.
XX OS
XX WO9827425-A1.
XX PN

```

DR WPI; 1998-251302/22.
XX
XX Screening for agents that effect cell cycle regulatory proteins - using a
PT cell line that expresses a reporter gene in response to regulation
PT through phosphorylation by a cyclin/CDK system.
XX
XX Example 4; Page 68; 93pp; English.
XX
XX Primers AAV60724-V60725 were used to PCR amplify codons 1-151 of the
XX human cyclin-dependent kinase 2 (hCDK2). The amplified product was used
XX to generate a fusion protein comprising part of the hCDK2 sequence linked
XX to codons 153-302 of the yeast PHO85 gene. The fusion protein is used to
XX screen for compounds that affect mammalian cell cycle regulatory
XX proteins. The method comprises administering a compound to a cell line,
XX which contains a reporter gene linked to an Upstream Activation Sequence
XX (UAS) and a promoter, where the UAS binds a transcription control factor
XX (TCF) which is regulated through cyclin/cyclin-dependent kinase (CDK)
XX phosphorylation. Also included in the construct is an effector gene
XX providing a gene product to permit normal cyclin/CDK regulation of the
XX TCF. Expression of the reporter gene is then analysed in the cell line,
XX thereby determining whether the compound affects the normal regulation.
XX The method can be used to identify inhibitors and activators of mammalian
XX cell cycle regulatory proteins, especially inhibitors and activators of
XX cyclins, CDKs, cyclin/CDK complexes, cyclin kinase inhibitors (CKIs), and
XX cyclin/CDK/CKI complexes. The identified agents can be used for
XX stimulating growth of cells (as in wound healing), or regulating
XX excessive cell growth and division (as in cancer therapy).
XX
SQ Sequence 21 BP; 5 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1033 GACTTTGGCGCTGGCCGAGC 1052
Db 21 GACTTTGGACTAGCCGAGC 2
RESULT 299
AAV40585/c
ID AAV40585 standard; DNA; 21 BP.
AC AAV40585;
AT 21-DEC-1998 (first entry)
XX
XX Human TSC gene exon 10 forward primer hTSCex10.
DE
XX
XX Thiazide-sensitive Na-Cl cotransporter; TSC; hTSC gene; human;
KW ion transport; Gitelman's syndrome; Bartter's syndrome;
KW hypokalaemic alkalosis; hypocalciuria; hypomagnesaemia; diagnosis;
KW therapy; SSCP; primer; ss.
XX
XX Synthetic.
OS
OS Homo sapiens.
XX
XX WO9829431-A1.
XX
XX 03-JUL-1998.
XX
XX 19-DEC-1997; 97WO-US023553.
XX
XX 31-DEC-1996; 96US-00778052.
XX (UYVA) UNIV YALE.
XX
XX Lifton RP, Simon DB;
PI
XX WPI; 1998-388029/33.
XX
XX Thiazide sensitive cotransporter and ATP sensitive potassium channel
PT genes - useful for developing products for the diagnosis and treatment of

PT ion transport disorders, e.g. Gitelman's Syndrome or Bartter's Syndrome.
XX
XX Example 1; Page 51; 105pp; English.
XX
XX Primers hTSCex10 forward and reverse (see AAV40585 and AAV40586,
XX respectively) are designed to amplify exon 10 of the human hTSC gene (see
XX AAV40561) that codes for thiazide-sensitive Na-Cl cotransporter TSC (see
XX AAV29682). Both primers are located within introns of hTSC. 27 Sets of
XX specific primers (see AAV40565-V40618) were used for SSCP analysis of
XX hTSC. Amplified products were analysed for molecular variants by
XX electrophoresis, and identified variants were sequenced. Complete linkage
XX of Gitelman's syndrome with TSC was demonstrated. Identification of the
XX molecular basis of Gitelman's syndrome allows for the genetic diagnosis
XX of this disorder. The invention provides products and methods useful for
XX diagnosis and treatment of Gitelman's syndrome and other ion transport
XX disorders
XX
SQ Sequence 21 BP; 9 A; 1 C; 10 G; 1 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1689 CTTCCCTGCTTACTCTCTGTC 1708
Db 21 CTTCCCTGCTTACTCTCTGTC 2
RESULT 300
AAV17948
ID AAV17948 standard; DNA; 21 BP.
AC AAV17948;
AT 11-MAY-1999 (first entry)
XX
XX CMV target sequence in immediate early gene region.
DE
XX
XX Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;
KW cytomegalovirus; inhibition; replication; sugar modification;
KW phosphorothioate; infection; retinitis; ss.
XX
XX Human herpesvirus 5.
OS
XX WO9845314-A1.
XX
XX 15-OCT-1998.
XX
XX 07-APR-1998; 98WO-US006895.
XX
XX 09-APR-1997; 97US-00838715.
XX (ISIS-) ISIS PHARM INC.
XX
XX Draper KG, Kisner DL, Anderson KP, Chapman S;
PI
XX WPI; 1998-568330/48.
XX
XX New antisense oligonucleotides that target cytomegalovirus nucleic acid -
PT particularly including 2-methoxyethoxy sugar modifications, especially
PT for treating viral retinitis, with long-lasting retention in the retina.
XX
XX Disclosure; Page 23; 99pp; English.
XX
XX Antisense oligonucleotides (AAV17861-X17924) are targeted to a nucleic
XX acid (AAV17925-X17948) encoding IE (immediate early) 1 or 2, or DNA
XX polymerase of cytomegalovirus (CMV) and are able to inhibit CMV
XX replication. The sequence shown here represents the target site in the
XX IE2 gene region and corresponds to the nuclear localisation signal 2
XX sequence. Optionally the oligonucleotides include at least one 2'-(2-
XX methoxyethoxy) sugar modification or phosphorothioate internucleotide
XX linkages. The oligonucleotides are used to inhibit CMV infections (by in
XX vivo or in vitro contact with cells, tissues or body fluids), especially

CC to treat or prevent CMV infections, particularly retinitis
 XX
 SQ Sequence 21 BP; 10 A; 5 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 5e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAACG 149
 ||| ||||| ||||| |||||
 Db 1 CGCAAGAGAGAGCAACG 20

RESULT 301
 AAX15075/c
 ID AAX15075 standard; DNA; 21 BP.

XX AAX15075;
 XX
 DT 20-MAR-2003 (revised)
 DT 16-APR-1999 (first entry)

XX CMV antisense chimeric oligonucleotide of the invention.

DE Nuclease resistant; ribofuranosyl moiety; 2'-aminoalkoxy; tumour;
 XX 2'-imidazolylalkoxy; modulation; activity; AIDS; atherosclerosis;
 KW phosphorothioate; DNA-RNA hybrid; ss.
 KW
 XX Synthetic.

Key	Location/Qualifiers
modified_base	1..20
	/*tag= a
	/note= "phosphorothioated"
misc_RNA	4..5
	/*tag= b
misc_RNA	17..18
	/*tag= c

US5872232-A.

16-FEB-1999.

06-JUN-1995; 95US-00471973.

11-JAN-1990; 90US-00463358.

13-AUG-1990; 90US-00566977.

12-AUG-1991; 91WO-US005720.

05-MAR-1992; 92US-00835932.

01-JUL-1992; 92US-00854634.

(ISIS-) ISIS PHARM INC.

Cook PD, Kawasaki AM;

WPI; 1999-166721/14.

New 2'-O-modified oligo-nucleotide(s) - comprising nucleotide(s)

comprising a 2'-aminoalkoxy or 2'-imidazolylalkoxy substituent, used for

hybridisation to RNA or DNA.

Example 34; Col 53; 48pp; English.

The present oligonucleotide exemplifies the oligonucleotides of the invention. Oligonucleotides of the invention are nuclease resistant, and comprise covalently-bound nucleosides that individually include a ribose or deoxyribose sugar portion and base portion where the nucleosides are joined together by internucleoside linkages such that the base portion of the nucleosides form a mixed base sequence that is complementary to a RNA base sequence or to a DNA base sequence. At least one of the nucleosides has a modified ribofuranosyl moiety bearing a 2'-aminoalkoxy or 2'-imidazolylalkoxy substituent. The nuclease resistant compounds can be used for modulating the activity of DNA or RNA. They can be used for

CC treating organisms having a disease characterised by the undesired
 CC production of a protein. Diverse organisms such as bacteria, yeast,
 CC protozoa, algae, plant and higher animal forms including warm-blooded
 CC animals can be treated in this manner. The compounds can be used for
 CC treating e.g. AIDS, atherosclerosis or tumours. They can also be used in
 CC diagnostic methods for detecting the presence or absence of abnormal RNA
 CC molecules, or abnormal or inappropriate expression of normal RNA
 CC molecules in organisms or cells. (Updated on 20-MAR-2003 to correct PR
 CC field.)
 XX

SQ Sequence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;

Best Local Similarity 85.0%; Pred. No. 5e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAACG 149
 ||| ||||| ||||| |||||
 Db 21 CGCAAGAGAGAGCAACG 2

RESULT 302

AAX15076/c

ID AAX15076 standard; DNA; 21 BP.

XX AAX15076;

XX

DT 20-MAR-2003 (revised)

DT 16-APR-1999 (first entry)

XX CMV antisense chimeric oligonucleotide of the invention.

DE Nuclease resistant; ribofuranosyl moiety; 2'-aminoalkoxy; tumour;
 KW 2'-imidazolylalkoxy; modulation; activity; AIDS; atherosclerosis;
 KW phosphorothioate; DNA-RNA hybrid; ss.
 KW
 XX Synthetic.

Key	Location/Qualifiers
modified_base	1..20
	/*tag= a
	/note= "phosphorothioated"
misc_RNA	4..6
	/*tag= b
misc_RNA	15..18
	/*tag= c

US5872232-A.

16-FEB-1999.

06-JUN-1995; 95US-00471973.

11-JAN-1990; 90US-00463358.

13-AUG-1990; 90US-00566977.

12-AUG-1991; 91WO-US005720.

05-MAR-1992; 92US-00835932.

01-JUL-1992; 92US-00854634.

(ISIS-) ISIS PHARM INC.

Cook PD, Kawasaki AM;

WPI; 1999-166721/14.

New 2'-O-modified oligo-nucleotide(s) - comprising nucleotide(s)
 comprising a 2'-aminoalkoxy or 2'-imidazolylalkoxy substituent, used for
 hybridisation to RNA or DNA.
 Example 34; Col 53; 48pp; English.

The present oligonucleotide exemplifies the oligonucleotides of the invention. Oligonucleotides of the invention are nuclease resistant, and

CC comprise covalently-bound nucleosides that individually include a ribose
 CC or deoxyribose sugar portion and base portion where the nucleosides are
 CC joined together by internucleoside linkages such that the base portion of
 CC the nucleosides form a mixed base sequence that is complementary to a RNA
 CC base sequence or to a DNA base sequence. At least one of the nucleosides
 CC has a modified ribofuranosyl moiety bearing a 2'-aminoalkoxy or 2'-
 CC imidazolylalkoxy substituent. The nuclease resistant compounds can be
 CC used for modulating the activity of DNA or RNA. They can be used for
 CC treating organisms having a disease characterised by the undesired
 CC production of a protein. Diverse organisms such as bacteria, yeast,
 CC protozoa, algae, plant and higher animal forms including warm-blooded
 CC animals can be treated in this manner. The compounds can be used for
 CC treating e.g. AIDS, atherosclerosis or tumours. They can also be used in
 CC diagnostic methods for detecting the presence or absence of abnormal RNA
 CC molecules, or abnormal or inappropriate expression of normal RNA
 CC molecules in organisms or cells. (Updated on 20-MAR-2003 to correct PR
 CC field.)
 XX
 SQ Sequence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other;
 Query Match 0.9%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 5e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 130 CGGATGAGAGAGATCAACG 149
 DB 21 CGCAGAGAGAGAGATCAACG 2
 RESULT 303
 AAX33398/c
 ID AAX33398 standard; DNA; 21 BP.
 XX
 AC AAX33398;
 XX
 DT 29-JUN-1999 (first entry)
 XX
 DE Phosphorothioate 21-mer oligonucleotide #3.
 XX
 KW Phosphorothioate; sulphurised oligonucleotide; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..21
 FT /tag= a
 FT /note= "phosphorothioate linkages"
 XX
 PN WO9919340-A1.
 XX
 PD 22-APR-1999.
 XX
 PF 13-OCT-1998; 98WO-US021502.
 XX
 PR 15-OCT-1997; 97US-00950779.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Cole DL, Ravikumar VT, Cheruvallath ZS;
 XX
 DR WPI; 1999-287949/24.
 XX
 PT Preparation of Phosphorothioate oligonucleotides applicable throughout
 XX nucleic acid chemistry.
 XX
 PS Example 3; Page 8; 17pp; English.
 XX
 CC The present invention describes a method for preparing phosphorothioate
 CC oligonucleotides by phosphorylating the 5'-hydroxyl of a nucleic acid
 CC moiety in an acetonitrile containing solvent mixture to form a phosphite
 CC intermediate (II) and oxidizing (II) with an acetyl disulfide in an
 CC acetonitrile containing solvent mixture to effect conversion of the
 CC intermediate to phosphorothioate (II). The present sequence represents a
 CC phosphorothioate oligonucleotide from an example of the present
 CC invention. The method can be used to sulphurise oligonucleotides of 8-50
 CC nucleotides. The method is widely applicable throughout nucleic acid
 CC chemistry. The process allows formation of phosphorothioate linkages in
 CC the oligonucleotides or derivatives, without the need for complex solvent
 CC mixtures and repeated washing or solvent changes. The process uses a
 CC simplified solvent system and produces oligonucleotides having
 CC phosphorothioate groups with efficiency and improved yields
 XX
 SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

CC aromatic solvents are less expensive to use than hazardous halogenated
 CC alkanes since they do not require large investments in recycling
 CC equipment to meet environmental standards for disposal. They are thus
 CC better suited for large scale operations. Sequences AA211587-594
 CC represent phosphorothioate oligomers synthesized using the new method of
 CC the invention
 XX
 SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 5e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 130 CGGATGAGAGAGATCAACG 149
 DB 21 CGCAGAGAGAGAGATCAACG 2
 RESULT 304
 AAX33398/c
 ID AAX33398 standard; DNA; 21 BP.
 XX
 AC AAX33398;
 XX
 DT 29-JUN-1999 (first entry)
 XX
 DE Phosphorothioate 21-mer oligonucleotide #3.
 XX
 KW Phosphorothioate; sulphurised oligonucleotide; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..21
 FT /tag= a
 FT /note= "phosphorothioate linkages"
 XX
 PN WO9919340-A1.
 XX
 PD 22-APR-1999.
 XX
 PF 13-OCT-1998; 98WO-US021502.
 XX
 PR 15-OCT-1997; 97US-00950779.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Cole DL, Ravikumar VT, Cheruvallath ZS;
 XX
 DR WPI; 1999-287949/24.
 XX
 PT Preparation of Phosphorothioate oligonucleotides applicable throughout
 XX nucleic acid chemistry.
 XX
 PS Example 3; Page 8; 17pp; English.
 XX
 CC The present invention describes a method for preparing phosphorothioate
 CC oligonucleotides by phosphorylating the 5'-hydroxyl of a nucleic acid
 CC moiety in an acetonitrile containing solvent mixture to form a phosphite
 CC intermediate (II) and oxidizing (II) with an acetyl disulfide in an
 CC acetonitrile containing solvent mixture to effect conversion of the
 CC intermediate to phosphorothioate (II). The present sequence represents a
 CC phosphorothioate oligonucleotide from an example of the present
 CC invention. The method can be used to sulphurise oligonucleotides of 8-50
 CC nucleotides. The method is widely applicable throughout nucleic acid
 CC chemistry. The process allows formation of phosphorothioate linkages in
 CC the oligonucleotides or derivatives, without the need for complex solvent
 CC mixtures and repeated washing or solvent changes. The process uses a
 CC simplified solvent system and produces oligonucleotides having
 CC phosphorothioate groups with efficiency and improved yields
 XX
 SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

```
Query Match      0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149
    ||| ||||| |||||
Db 21 CGCAAGAAGAAGACCAACG 2

RESULT 305
AAX05474/C
ID AAX05474 standard; DNA; 21 BP.
XX AC AAX05474;
XX DT 20-APR-1999 (first entry)
XX DE Chimeric 2'-O-methyl antisense oligo 4326 for CMV.
XX KW Nuclease resistant; modified; deoxyfuranosyl moiety; therapy; infection;
XX KW AIDS; atherosclerosis; tumour; CMV; antisense; DNA/RNA hybrid; ss.
XX OS Synthetic.
XX OS Human herpesvirus 5.
XX FH Key Location/Qualifiers
FT modified_base 1..21 /*tag= a
FT /*notes= "contains phosphorothioate linkages; 2' O-methyl
FT /*modification on some base pairs"
FT misc_RNA 1..21 /*tag= b
XX US5859221-A.
XX 12-JAN-1999.
XX 06-JUN-1995; 95US-00468037.
XX 11-JAN-1990; 90US-00463358.
XX 13-AUG-1990; 90US-00566977.
XX 12-AUG-1991; 91WO-US005720.
XX 05-MAR-1992; 92US-00835932.
XX 01-JUL-1992; 92US-00854634.
XX (ISIS-) ISIS PHARM INC.
XX Cook PD, Kawasaki AM;
XX WPI; 1999-120005/10.
XX Nuclease resistant oligonucleotide analogues - having nucleosides
XX including modified deoxyfuranosyl moiety bearing 2'-substituent to
XX increase binding affinity.
XX Example 34; Col 54; 49pp; English.
XX The invention relates to a nuclease resistant compound that hybridises
XX with RNA or DNA. The compound comprises covalently-bound nucleosides that
XX individually include a ribose or deoxyribose sugar portion and a base
XX portion, where the nucleosides are joined together by internucleoside
XX linkages such that the base portion of the nucleosides form a mixed base
XX sequence that is complementary to a RNA base sequence or to a DNA base
XX sequence; and where at least 1 of the nucleosides includes a modified
XX deoxyfuranosyl moiety bearing a 2'-substituent selected from cyano,
XX fluoromethyl, thioalkoxy, alkylsulphonyl, alkylsulphonyl, allyloxy and
XX alkenoxy groups. The nuclease resistant oligonucleotides (ONs) can bind
XX to and modulate the activity of DNA or RNA and can be used for treating
XX organisms having a disease characterised by the undesired production of a
XX protein. They can be used in therapeutic or prophylactic treatment in
XX organisms such as bacteria, yeast, protozoa, algae, plant and higher
XX animal forms including warm-blooded animals. The ONs can also be used for
XX treating infections, AIDS, atherosclerosis or tumours. The products can
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CC be used for detection and diagnosis. The ONs provide enhanced binding to
CC targets. Increased binding of 2'-sugar modified sequence-specific ONs
CC provides superior potency and specificity compared to phosphorus-modified
CC ONs. The present sequence represents a chimeric antisense oligo for CMV
XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other;
Query Match      0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149
    ||| ||||| |||||
Db 21 CGCAAGAAGAAGACCAACG 2

RESULT 306
AAX05473/C
ID AAX05473 standard; DNA; 21 BP.
XX AC AAX05473;
XX DT 20-APR-1999 (first entry)
XX DE Chimeric 2'-O-methyl antisense oligo 4325 for CMV.
XX KW Nuclease resistant; modified; deoxyfuranosyl moiety; therapy; infection;
XX KW AIDS; atherosclerosis; tumour; CMV; antisense; DNA/RNA hybrid; ss.
XX OS Synthetic.
XX OS Human herpesvirus 5.
XX FH Key Location/Qualifiers
FT modified_base 1..21 /*tag= a
FT /*notes= "contains phosphorothioate linkages; 2' O-methyl
FT /*modification on some base pairs"
FT misc_RNA 1..21 /*tag= b
XX US5859221-A.
XX 12-JAN-1999.
XX 06-JUN-1995; 95US-00468037.
XX 11-JAN-1990; 90US-00463358.
XX 13-AUG-1990; 90US-00566977.
XX 12-AUG-1991; 91WO-US005720.
XX 05-MAR-1992; 92US-00835932.
XX 01-JUL-1992; 92US-00854634.
XX (ISIS-) ISIS PHARM INC.
XX Cook PD, Kawasaki AM;
XX WPI; 1999-120005/10.
XX Nuclease resistant oligonucleotide analogues - having nucleosides
XX including modified deoxyfuranosyl moiety bearing 2'-substituent to
XX increase binding affinity.
XX Example 34; Col 54; 49pp; English.
XX The invention relates to a nuclease resistant compound that hybridises
XX with RNA or DNA. The compound comprises covalently-bound nucleosides that
XX individually include a ribose or deoxyribose sugar portion and a base
XX portion, where the nucleosides are joined together by internucleoside
XX linkages such that the base portion of the nucleosides form a mixed base
XX sequence that is complementary to a RNA base sequence or to a DNA base
XX sequence; and where at least 1 of the nucleosides includes a modified
XX deoxyfuranosyl moiety bearing a 2'-substituent selected from cyano,
XX fluoromethyl, thioalkoxy, alkylsulphonyl, alkylsulphonyl, allyloxy and
```

CC alkeneoxy groups. The nuclease resistant oligonucleotides (ONs) can bind
CC to and modulate the activity of DNA or RNA and can be used for treating
CC organisms having a disease characterised by the undesired production of a
CC protein. They can be used in therapeutic or prophylactic treatment in
CC organisms such as bacteria, yeast, protozoa, algae, plant and higher
CC animal forms including warm-blooded animals. The ONs can also be used for
CC treating infections, AIDS, atherosclerosis or tumours. The products can
CC be used for detection and diagnosis. The ONs provide enhanced binding to
CC targets. Increased binding of 2'-sugar modified sequence-specific ONs
CC provides superior potency and specificity compared to phosphorus-modified
CC ONs. The present sequence represents a chimeric antisense oligo for CMV
XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAAAACG 149
||| ||||| |||||
Db 21 CGCAAGAGAGAGCAAAACG 2

RESULT 307
AAK99984/C
ID AAK99984 standard; DNA; 21 BP.

XX
AC AAK99984;

DT 19-OCT-1999 (first entry)

XX Phosphorothioate oligonucleotide #3.

XX Phosphorothioate oligonucleotide; benzyl(thio)phosphite residue; primer;
KW benzyl(thio)phosphoramidite; probe production; linker; adapter;
KW gene fragment; ss.

XX Synthetic.

XX Key Location/Qualifiers
FH modified_base 1..21
FT /*tag= a
FT /*note= "phosphorothioate backbone"

XX WO9940101-A1.

XX 12-AUG-1999.

XX 09-FEB-1999; 99WO-US002474.

XX 10-FEB-1998; 98US-00021277.

XX (ISIS-) ISIS PHARM INC.

XX Capaldi DC, Ravikumar VT;

XX WPI; 1999-508484/42.

XX Oligonucleotide synthesis using substituted benzyl phosphoramidite for
FT reaction with synthon having free 5'-hydroxy.

XX Example 12; Page 47; 72pp; English.

XX This sequence represents a phosphorothioate oligonucleotide synthesised
XX using the method of the invention. The method is for the preparation of
XX oligonucleotides containing a substituted benzyl(thio)phosphite residue
XX comprises reacting an oligonucleotide with a 3' substituted
XX benzyl(thio)phosphoramidite with an (oligo)nucleotide having a free 5'-
XX hydroxy, with one of the reactants, optionally immobilised on a solid
XX phase. The method is used to prepare oligonucleotides, or analogues, for
XX use as probes, primers, linkers, adapters or gene fragments, for
XX diagnostic or therapeutic use, or as research reagents. The specified
XX substituted benzyl group can be eliminated without release of toxic

CC acrylonitrile (contrast conventional 2-cyanoethoxy protecting groups)
XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAAAACG 149
||| ||||| |||||
Db 21 CGCAAGAGAGAGCAAAACG 2

RESULT 308

AAK18799/C

ID AAK18799 standard; DNA; 21 BP.

XX
AC AAK18799;

XX 10-MAY-1999 (first entry)

XX Target cytomegalovirus antisense oligonucleotide ISIS 2922.

XX Cellular adhesion protein; proliferation; antisense oligonucleotide;
KW alimentary canal; transport; gastrointestinal mucosa; cancer;
KW Alzheimer's disease; beta-thalassemia; malaria; viral infection; HIV;
KW inflammation; ss.

XX Synthetic.

XX WO9901579-A1.

XX 14-JAN-1999.

XX 01-JUL-1998; 98WO-US013574.

XX 01-JUL-1997; 97US-0086829.

XX (ISIS-) ISIS PHARM INC.

XX Teng C, Hardee G;

XX WPI; 1999-106077/09.

XX Composition comprising nucleic acid and penetration enhancer - used
PT particularly for delivering therapeutic antisense oligonucleotides across
PT the gastrointestinal mucosa, provides high bioavailability.

XX Example 2; Page 112; 115pp; English.

XX A pharmaceutical composition has been developed which comprises a nucleic
XX acid and at least one penetration enhancer. The compositions are used:
CC (i) to treat or prevent any disease or disorder that can be treated with
CC the nucleic acid, e.g. cancer, Alzheimer's disease, beta-thalassemia,
CC malaria, viral infections (including human immune deficiency virus
CC (HIV)), inflammation, in human or animal medicine; (ii) to investigate
CC the role of a gene or gene product in non-human animals; and (iii) to
CC modulate gene expression in cells, tissues or organs. The compositions
CC provide bioavailability of at least 15, preferably 17-35%. The
CC penetration enhancer improves: (i) transport of the nucleic acid across
CC the mucosa of the alimentary canal and into cells; and (ii) increases
CC stability of the nucleic acid. Oral administration avoids the
CC complications and expense of intravenous or other methods of
CC administration. AAK1869 to AAK18799 and AAK18801 represent antisense
CC oligonucleotides which can be used as the nucleic acid in the method of
CC the invention

XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;

Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

ID AAZ10307 standard; DNA; 21 BP.
XX
AC AAZ10307;
XX
XX
DT 20-MAR-2003 (revised)
DT 08-NOV-1999 (first entry)
XX
XX
DE Oligonucleotide used to inhibit CMV replication.
XX
XX Antisense oligonucleotide; CMV replication; nuclease resistance;
KW RNase H strand cleavage; phosphorothioate; oligonucleotide therapeutic;
KW AIDS; atherosclerosis; DNA/RNA hybrid; ss.
XX
OS Synthetic.
XX
XX Key Location/Qualifiers
FH misc_RNA 1..7
FT /*tag= a
FT misc_RNA 16..21
FT /*tag= b
XX
XX US955589-A.
PN
XX
XX 21-SEP-1999.
XX
XX 06-JUN-1995; 95US-00465880.
XX
XX 24-DEC-1991; 91US-00814961.
PR 23-DEC-1992; 92WO-US011339.
PR 21-JUN-1994; 94US-00244993.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Monia BP, Cook PD;
PI
XX
XX WPI; 1999-539598/45.
DR
XX
XX Oligonucleotides eliciting RNase H activity useful for diagnosis and
PT treatment of diseases e.g AIDS or atherosclerosis.
XX
XX Example 17; Col 27; 34pp; English.
XX
XX The present sequence represents a phosphorothioate antisense
CC oligonucleotide used to inhibit cauliflower mosaic virus (CMV)
CC replication. The oligonucleotide is a gapped 2' modified oligonucleotide,
CC whereby one part has at least two consecutive 2'-P (2'-H) nucleotides and
CC the second part has at least five consecutive nucleotides with 2'-H sugar
CC moieties. The modified oligonucleotide has increased nuclease resistance,
CC and increased binding affinity for substrates. The oligonucleotide
CC elicits RNase H strand cleavage of specific RNAs. Oligonucleotides of the
CC invention are useful for the diagnosis, detection and treatment of
CC conditions susceptible to oligonucleotide therapeutics (e.g. AIDS and
CC atherosclerosis). (Updated on 20-MAR-2003 to correct PR field.)
XX
XX Sequence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 130 CGGATGAGAGATCAACG 149
DB 21 CGCAAGAGAGAGCAACG 2
RESULT 312
AAZ23678/C
ID AAZ23678 standard; DNA; 21 BP.
XX
AC AAZ23678;
XX
XX 18-JUN-1999 (first entry)
DT
XX

DE Deletion sequence oligonucleotide 131.
XX
XX Deletion sequence oligonucleotide; sensor array; eukaryotic pathogen;
KW probe; cellular adhesion modulator; cellular proliferation modulator;
KW human retrovirus; human immunodeficiency virus; non-human retrovirus;
KW HIV; primer; ss.
XX
OS Synthetic.
XX
XX WO9911820-A1.
PN
XX 11-MAR-1999.
PD
XX
XX 01-SEP-1998; 98WO-US018084.
PF
XX 02-SEP-1997; 97US-00923771.
PR
XX (ISIS-) ISIS PHARM INC.
PA
XX Chen D, Srivatsa GS;
PI
XX WPI; 1999-205198/17.
DR
XX
XX New compositions comprising sensor arrays made up of unique probe
PT oligonucleotides - useful for characterizing a sample of target deletion
PT oligonucleotides.
XX
XX Example 9; Page 145; 163pp; English.
XX
XX This invention describes a novel composition comprising a number of
CC sensor arrays, where each array comprises a unique probe oligonucleotide,
CC which is the reverse complement of part of a unique target
CC oligonucleotide present in a mixture of target deletion sequence
CC oligonucleotides. The compositions form a method for characterizing a
CC sample of target deletion oligonucleotides which are labelled and
CC hybridize with the probe oligonucleotides of the sensor arrays. Such
CC oligonucleotides and their targets are represented in AAX23548-X23709.
CC Oligonucleotides characterized by the method form pharmaceutical
CC compositions that are useful for modulating cellular adhesion or
CC proliferation, and being active against a eukaryotic pathogen, a human
CC retrovirus, a human immunodeficiency virus (HIV), or a non-human
CC retrovirus, including influenza virus, Epstein-Barr virus, Respiratory
CC Syncytial Virus or cytomegalovirus (CMV). The compositions enable
CC characterization of deletion sequence oligonucleotides having related,
CC but different nucleobase sequences, and quantification of different
CC species of deletion sequence ("target") oligonucleotides in a mixture.
CC Also, if the specificity of the oligonucleotide's nucleobase sequence for
CC its reverse complement is not modified, the method may be performed using
CC oligodioxynucleotides
XX
XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 130 CGGATGAGAGATCAACG 149
DB 21 CGCAAGAGAGAGCAACG 2
RESULT 313
AAZ23548/C
ID AAX23548 standard; DNA; 21 BP.
XX
XX AAX23548;
XX
XX 18-JUN-1999 (first entry)
DT
XX
XX Deletion sequence oligonucleotide 1.
DE
XX
XX Deletion sequence oligonucleotide; sensor array; eukaryotic pathogen;
KW probe; cellular adhesion modulator; cellular proliferation modulator;
KW

KW human retrovirus; human immunodeficiency virus; non-human retrovirus;
KW HIV, primer; ss.
XX
OS Synthetic.
XX
XX WO911820-A1.
XX
XX 11-MAR-1999.
XX
XX 01-SEP-1998; 98WO-US018084.
XX
XX 02-SEP-1997; 97US-00923771.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Chen D, Srivatsa GS;
XX
XX WPI; 1999-205198/17.
XX
XX New compositions comprising sensor arrays made up of unique probe
XX oligonucleotides - useful for characterizing a sample of target deletion
XX oligonucleotides.
XX
XX Example 1; Page 89; 163pp; English.
XX
XX This invention describes a novel composition comprising a number of
XX sensor arrays, where each array comprises a unique probe oligonucleotide,
XX which is the reverse complement of part of a unique target
XX oligonucleotide present in a mixture of target deletion sequence
XX oligonucleotides. The compositions form a method for characterizing a
XX sample of target deletion oligonucleotides which are labelled and
XX hybridize with the probe oligonucleotides of the sensor arrays. Such
XX oligonucleotides and their targets are represented in AAM23548-X23709.
XX oligonucleotides characterized by the method form pharmaceutical
XX compositions that are useful for modulating cellular adhesion or
XX proliferation, and being active against a eukaryotic pathogen, a human
XX retrovirus, a human immunodeficiency virus (HIV), or a non-human
XX retrovirus, including influenza virus, Epstein-Barr virus, Respiratory
XX Syncytial Virus or cytomegalovirus (CMV). The compositions enable
XX characterization of deletion sequence oligonucleotides having related,
XX but different nucleobase sequences, and quantification of different
XX species of deletion sequence ("target") oligonucleotides in a mixture.
XX Also, if the specificity of the oligonucleotide's nucleobase sequence for
XX its reverse complement is not modified, the method may be performed using
XX oligodeoxynucleotides
XX
XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
XX
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 130 CGGATGAAGAGATCAACG 149
DB 21 CGCAAGAAGAGACCAACG 2
RESULT 314
AAV99279
ID AAV99279 standard; DNA; 21 BP.
AC AAV99279;
XX
XX 09-MAR-1999 (first entry)
XX
XX HIV 5' UTR homology region and cellular regulatory factor (c-abl).
XX
XX defibrotide; polyanion salt; HIV; protozoan infection; schistosoma;
XX Schistosoma leishmania; trypanosoma; fungus infection;
XX Pneumocystis carinii; malaria; viral infection; genetic disease;
XX Duchenne's muscular dystrophy; Down's syndrome; degenerative disease;
XX neoplasia; cancer; skin condition; drug resistance; ss.
XX

OS Synthetic.
OS Human immunodeficiency virus.
XX
XX WO9848843-A1.
XX
XX 05-NOV-1998.
XX
XX 28-APR-1998; 98WO-US008357.
XX
XX 28-APR-1997; 97US-00848013.
XX
XX (BURC/) BURCOGLU A.
XX
XX Burcoglu A;
XX
XX WPI; 1999-034643/03.
XX
XX Use of defibrotide nucleic acid components - for treating e.g. infectious
XX diseases, genetic diseases, degenerative diseases, DNA damage, neoplasia
XX and skin disease, particularly HIV infection.
XX
XX Claim 33; Page 84; 96pp; English.
XX
XX Oligonucleotides AAV99271-80 represent modified defibrotide sequences
XX containing a Human immunodeficiency virus (HIV) homology region and a
XX cellular regulatory factor. Defibrotide is a polyanion salt of a
XX deoxyribonucleic acid obtained from mammalian tissue. The products can be
XX used for treating diseases such as infectious disease such as HIV
XX infection, protozoan infection, schistosoma infection e.g. Schistosoma
XX japonicum, Schistosoma leishmania infection, Trypanosoma infection e.g.
XX Trypanosoma Cruzi, and fungus infection e.g. Candida tropicalis and
XX Candida Albicans, Aspergillus infection, Pneumocystis carinii infection,
XX malaria, Plasmodium vivax, gram negative bacterial infection,
XX Cytomegalovirus infection, Hepatitis virus infection, human papilloma
XX virus infection; genetic diseases e.g. Duchenne's muscular dystrophy and
XX Down's syndrome; degenerative diseases e.g. encephalopathy, dementia,
XX Alzheimer's disease, Parkinson's disease, neuropathy, cardiomyopathy,
XX aging, Kearn's Sayre syndrome, retinitis pigmentosa, ataxia, seizures,
XX proximal muscle weakness, Leber's hereditary optic neuropathy, optic
XX neuritis, and radiation damage; neoplasia, e.g. lympho-proliferative
XX diseases, lymphomas, Kaposi's sarcoma, pancreatic cancer, neuroblastoma,
XX leukemia, bladder carcinoma, breast cancer, skin cancer, lung cancer, and
XX colon cancer; and skin diseases, e.g. molluscum contagiosum, bacillary
XX angiomatosis, seborrheic dermatitis, psoriasis, Reiter's syndrome, insect
XX bite reaction, Staphylococcal folliculitis, Eosinophilic folliculitis. In
XX addition a drug resistance can be treated via administering the nucleic
XX acid components of defibrotide and the variants in combination with the
XX drug, e.g. a protease inhibitor
XX
XX Sequence 21 BP; 6 A; 4 C; 9 G; 2 T; 0 U; 0 Other;
XX
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 950 ACTGCCACCGCAGAGGTG 969
DB 1 AGTCAACCGCAGGAGGTG 20
RESULT 315
AAC62738/c
ID AAC62738 standard; DNA; 21 BP.
XX
XX AAC62738;
XX
XX 05-FEB-2001 (first entry)
XX
XX Phosphorothioate oligonucleotide ISIS-2922.
XX
XX Phosphorothioate; lipid; liposome; drug deliver; ss.
XX
XX Unidentified.
OS

```
XX PN WO200059474-A1.
XX PD 12-OCT-2000.
XX PF 06-APR-2000; 2000WO-US009473.
XX PR 06-APR-1999; 99US-00287175.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Leamon CP;
XX PI WPI; 2000-679320/66.
XX PT New pro-cationic lipid compounds useful as components of liposomes used
XX PT as vehicles for delivering pharmaceutical agents into cells.
XX PS Disclosure; Page 31; 65pp; English.
XX PS The present oligonucleotide is given in a specification disclosing a new
XX CC lipid compound and its salts, solvates and hydrates. The compound
XX CC comprises a hydrophobic tail part covalently linked to a hydrophilic head
XX CC part. A region proximal to the hydrophobic tail part has a net positive
XX CC charge at physiological pH and a region distal to the hydrophobic tail
XX CC part has a net negative charge at physiological pH. A disulphide bond
XX CC connects the regions. The lipid compound is useful for the construction
XX CC of liposomes used as vehicles for delivering pharmaceutical agents into
XX CC cells. The lipids and liposomes are fusogenic with membranes and deliver
XX CC pharmaceutical agents to tissues or cells without inherent aggregation,
XX CC which reduces toxicity
XX SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149
Db 21 CGCAAGAGAGAGCAACG 2

RESULT 316
AAC62741/c
ID AAC62741 standard; DNA; 21 BP.
XX AC AAC62741;
XX DT 05-FEB-2001 (first entry)
XX DE Phosphorothioate oligonucleotide ISIS-13312.
XX KW Phosphorothioate; lipid; liposome; drug deliver; ss.
XX OS Unidentified.
XX PN WO200059474-A1.
XX PD 12-OCT-2000.
XX PF 06-APR-2000; 2000WO-US009473.
XX PR 06-APR-1999; 99US-00287175.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Leamon CP;
XX PI WPI; 2000-679320/66.
XX PT New pro-cationic lipid compounds useful as components of liposomes used
XX PT as vehicles for delivering pharmaceutical agents into cells.

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149
Db 21 CGCAAGAGAGAGCAACG 2

RESULT 317
AAC61632
ID AAC61632 standard; DNA; 21 BP.
XX AC AAC61632;
XX DT 19-FEB-2001 (first entry)
XX DE Mismatch reporter probe used to detect human lymphotoxin gene alleles.
XX KW Human; lymphotoxin; bioelectronic microchip;
XX KW single nucleotide polymorphism; probe; ss.
XX OS Homo sapiens.
XX PN WO200058522-A1.
XX PD 05-OCT-2000.
XX PF 28-MAR-2000; 2000WO-US008617.
XX PR 30-MAR-1999; 99US-0126865P.
XX PA (NANO-) NANOGEN INC.
XX PI Giles PN, Dillon PJ, Wu DJ, Foster CB, Chanock SJ;
XX PI WPI; 2000-638354/61.
XX PT Detecting single nucleotide polymorphism by utilizing a bioelectronic
XX PT microchip having several test sites.
XX PS Example 3; Page 17; 46pp; English.
XX PS Reporter probes AAC61629-32 were used to detect human lymphotoxin gene
XX CC alleles. The method of the invention was used for detecting single
XX CC nucleotide polymorphisms (SNPs) in the lymphotoxin gene. The method
XX CC utilises electronic circuitry on silicon microchips. The method provides
XX CC accurate discrimination of amplified DNA samples following electronic
XX CC transport, concentration, and attachment of DNA to selected electrodes
XX CC (test sites). The test sites make up organised arrays of samples that are
XX CC distinguished by using internal controls of dual labelled reporters
XX CC comprising wild type and mismatched sequences to validate the SNP
XX CC genotype. Multiples of SNPs in target nucleic acids from a patient sample
XX CC source or a SNP in target nucleic acids of multiple patient sample
XX CC sources can also be detected using the electronically addressable
XX CC microchip
```

```
XX PS Disclosure; Page 31; 65pp; English.
XX CC The present oligonucleotide is given in a specification disclosing a new
XX CC lipid compound and its salts, solvates and hydrates. The compound
XX CC comprises a hydrophobic tail part covalently linked to a hydrophilic head
XX CC part. A region proximal to the hydrophobic tail part has a net positive
XX CC charge at physiological pH and a region distal to the hydrophobic tail
XX CC part has a net negative charge at physiological pH. A disulphide bond
XX CC connects the regions. The lipid compound is useful for the construction
XX CC of liposomes used as vehicles for delivering pharmaceutical agents into
XX CC cells. The lipids and liposomes are fusogenic with membranes and deliver
XX CC pharmaceutical agents to tissues or cells without inherent aggregation,
XX CC which reduces toxicity
XX SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149
Db 21 CGCAAGAGAGAGCAACG 2

RESULT 317
AAC61632
ID AAC61632 standard; DNA; 21 BP.
XX AC AAC61632;
XX DT 19-FEB-2001 (first entry)
XX DE Mismatch reporter probe used to detect human lymphotoxin gene alleles.
XX KW Human; lymphotoxin; bioelectronic microchip;
XX KW single nucleotide polymorphism; probe; ss.
XX OS Homo sapiens.
XX PN WO200058522-A1.
XX PD 05-OCT-2000.
XX PF 28-MAR-2000; 2000WO-US008617.
XX PR 30-MAR-1999; 99US-0126865P.
XX PA (NANO-) NANOGEN INC.
XX PI Giles PN, Dillon PJ, Wu DJ, Foster CB, Chanock SJ;
XX PI WPI; 2000-638354/61.
XX PT Detecting single nucleotide polymorphism by utilizing a bioelectronic
XX PT microchip having several test sites.
XX PS Example 3; Page 17; 46pp; English.
XX PS Reporter probes AAC61629-32 were used to detect human lymphotoxin gene
XX CC alleles. The method of the invention was used for detecting single
XX CC nucleotide polymorphisms (SNPs) in the lymphotoxin gene. The method
XX CC utilises electronic circuitry on silicon microchips. The method provides
XX CC accurate discrimination of amplified DNA samples following electronic
XX CC transport, concentration, and attachment of DNA to selected electrodes
XX CC (test sites). The test sites make up organised arrays of samples that are
XX CC distinguished by using internal controls of dual labelled reporters
XX CC comprising wild type and mismatched sequences to validate the SNP
XX CC genotype. Multiples of SNPs in target nucleic acids from a patient sample
XX CC source or a SNP in target nucleic acids of multiple patient sample
XX CC sources can also be detected using the electronically addressable
XX CC microchip
```

QY	130	CGGATCAAGAAGATCAACG	149
DB	21	CGCAAGAAGAAGCAAAACG	2
RESULT 319			
AAA39246			
ID	AAA39246	standard; DNA; 21 BP.	
XX	AC	AAA39246;	
XX	DT	07-SEP-2000 (first entry)	
XX	DE	Mouse type II hair keratin clone pmKII-6 3'-noncoding region PCR primer.	
XX	KW	Hair; keratin; hair cleansing composition; pre-shampoo; shampoo;	
XX	KW	conditioning rinse; hair styling; gel; spray; mousse; dyeing; bleaching;	
XX	KW	tinting; nail care product; nail polish remover; nail polish; PCR primer.	
XX	SS	ss.	
OS	Mus	sp.	
XX	PN	WO200023039-A2.	
XX	PD	27-APR-2000.	
XX	PF	18-OCT-1999; 99WO-US024426.	
XX	PR	16-OCT-1998; 98US-00174186.	
XX	PA	(ENSL/) ENSLEY B D.	
XX	PI	Ensley BD;	
XX	DR	WPI; 2000-339487/29.	
XX	PT	Formulating hair treatment composition useful for producing hair	
XX	PT	preparations for improved hair characteristics by using human keratin	
XX	XX	allelic variants, which has not been cross-linked.	
XX	PS	Example 3; Page 43; 55pp; English.	
XX	CC	The present invention describes a method for formulating a hair treatment	
XX	CC	composition by using non-naturally occurring human keratin protein which	
XX	CC	has not been previously cross-linked. The method is useful for producing	
XX	CC	hair treatment composition for improved hair characteristics, and hair	
XX	CC	treatment preparations tailored to an individual's preference. The	
XX	CC	keratin is added to hair cleansing compositions, e.g. pre-shampoo,	
XX	CC	shampoo, or conditioning rinse, to hair styling or shaping compositions,	
XX	CC	e.g. gel, spray or mousse, or in hair dyeing, bleaching or tinting	
XX	CC	compositions. It may also be used in developing nail care products, such	
XX	CC	as nail polish and nail polish remover. The method provides hair	
XX	CC	treatment preparations tailored to the individual's preferences as well	
XX	CC	as to the manufacturers' preferences of hair treatment compositions. The	
XX	CC	present sequence represents a PCR primer for the murine type II hair	
XX	CC	keratin clone pmKII-6 3'-noncoding region, which is used in an example	
XX	CC	from the present invention	
XX	SQ	Sequence 21 BP; 3 A; 7 C; 8 G; 3 T; 0 U; 0 Other;	
		Query Match 0.9%; Score 15.2; DB 1; Length 21;	
		Best Local Similarity 85.0%; Pred. No. 5e+02; Indels 0; Gaps 0;	
		Matches 17; Conservative 0; Mismatches 3;	
QY	1468	CTGGGGGAGCGGATCCACAA	1487
DB	1	CTGGGGGAGCGGATCTCCA	20
RESULT 320			
AAZ40364/C			
ID	AAZ40364	standard; DNA; 21 BP.	

CC nucleotides includes a modified ribofuranosyl group bearing a 2'-fluoro
 CC substituent; provided that at least two of the nucleotides are 2'-fluoro
 CC modified ribofuranosyl nucleotides when the internucleotide linkages are
 CC phosphodiester nucleotides. (I) bind to their target mRNA and inhibit its
 CC expression. (I) are resistant to nuclease degradation and hybridise with
 CC appropriate strength and fidelity to its target RNA/DNA. (I) are also
 CC useful as research agents, diagnostic agents and as oligonucleotide
 CC angiotherapy. (I) may be used to treat atherosclerosis following
 CC be used in conjunction with AZT to treat AIDS patients. (I) have been
 CC used to modulate the expression of RAR gene, a cellular gene whose
 CC activate form has been implicated in abnormal cell proliferation and
 CC tumour formation. (I) are also used to modulate the expression of protein
 CC kinase C. (I) exhibit hybridisation properties of higher quality than
 CC phosphorous modified oligonucleotide duplexes containing
 CC methylphosphonates, phosphoramidates and phosphate triesters. The present
 CC sequence represent an oligonucleotide used in the exemplification of the
 CC present invention

XX Sequence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other;
 SQ Query Match 0.9%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 5e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 130 CGGATGAGAGATCAACG 149
 Db 21 CGCAGAAGAAGAGCAACG 2

RESULT 326
 AAZ48171/C
 ID AAZ48171 standard; DNA; 21 BP.
 XX AC AAZ48171;
 XX DT 14-MAR-2000 (first entry)
 XX DE CMV replication chimeric phosphorothioate oligonucleotide SEQ ID NO:18.
 XX KW Polyrbonucleotide solid phase synthesis; diagnosis; hybridisation;
 KW protein production modulation; 2'-deoxyfuranosyl moiety; anti-HIV;
 KW antiarteriosclerotic; nuclease resistant; atherosclerosis; AIDS;
 KW abnormal cell proliferation; tumour formation; ss.
 XX OS Synthetic.
 XX PN US6005087-A.
 XX PD 21-DEC-1999.
 XX PF 05-MAR-1998; 98US-00035357.
 XX PR 11-JAN-1990; 90US-00463358.
 PR 13-AUG-1990; 90US-00566977.
 PR 12-AUG-1991; 91WO-US005720.
 PR 05-MAR-1992; 92US-00835932.
 PR 01-JUL-1992; 92US-00854634.
 PR 06-JUN-1995; 95US-00468037.
 XX (ISIS-) ISIS PHARM INC.
 XX PI Kawasaki AM, Cook PD;
 XX DR WPI; 2000-072074/06.
 XX PT Nuclease resistant oligonucleotides useful as research agents, diagnostic
 PT agents, and in the treatment of atherosclerosis and AIDS.
 XX PS Example 34; Col 54; 49pp; English.
 XX CC The present invention describes nuclease resistant oligonucleotides (I)
 CC comprising 2'-fluoro modified ribofuranosyl nucleotides. (I) comprise

CC covalently bound nucleotides, where the nucleotides are joined together
 CC by: (a) internucleotide linkages such that the base portion of the
 CC nucleotides forms a mixed base sequence; and (b) at least one of the
 CC nucleotides includes a modified ribofuranosyl group bearing a 2'-fluoro
 CC substituent; provided that at least two of the nucleotides are 2'-fluoro
 CC modified ribofuranosyl nucleotides when the internucleotide linkages are
 CC phosphodiester nucleotides. (I) bind to their target mRNA and inhibit its
 CC expression. (I) are resistant to nuclease degradation and hybridise with
 CC appropriate strength and fidelity to its target RNA/DNA. (I) are also
 CC useful as research agents, diagnostic agents and as oligonucleotide
 CC therapeutics. (I) may be used to treat atherosclerosis following
 CC angiotherapy. (I) may be used to treat AIDS patients. (I) may also
 CC be used in conjunction with AZT to treat AIDS patients. (I) have been
 CC used to modulate the expression of RAR gene, a cellular gene whose
 CC activate form has been implicated in abnormal cell proliferation and
 CC tumour formation. (I) are also used to modulate the expression of protein
 CC kinase C. (I) exhibit hybridisation properties of higher quality than
 CC phosphorous modified oligonucleotide duplexes containing
 CC methylphosphonates, phosphoramidates and phosphate triesters. The present
 CC sequence represent an oligonucleotide used in the exemplification of the
 CC present invention

XX Sequence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other;
 SQ Query Match 0.9%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 5e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 130 CGGATGAGAGATCAACG 149
 Db 21 CGCAGAAGAAGAGCAACG 2

RESULT 327
 AAAL4473/C
 ID AAAL4473 standard; DNA; 21 BP.
 XX AC AAAL4473;
 XX DT 21-AUG-2000 (first entry)
 XX DE Synthetic oligonucleotide #3.
 XX KW Solid phase DNA synthesis; phosphoramidate nucleoside; acetonitrile;
 KW water content; synthetic oligonucleotide; ss.
 XX OS Synthetic.
 XX FH Key Location/Qualifiers
 FT modified_base 1..21
 FT /*tag= a
 FT /note= "Phosphorothioate linkages"
 XX WO2000020431-A1.
 XX PD 13-APR-2000.
 XX PF 01-OCT-1999; 99WO-US022892.
 XX PR 06-OCT-1998; 98US-00167165.
 XX (ISIS-) ISIS PHARM INC.
 XX PI Scozzari A;
 XX DR WPI; 2000-303729/26.
 XX PT Coupling of a phosphoramidate nucleoside to a solid support-bound
 PT nucleoside, useful for the synthesis of oligonucleotides for use in
 PT diagnostic, research or therapeutic applications.
 XX PS Example 8; Page 20; 30pp; English.

CC The invention relates to the use of acetonitrile having a water content
CC of 30-1250 ppm in the linking of a phosphoramidite nucleoside to a solid
CC support-bound nucleoside, and to the use of this process in the synthesis
CC of oligonucleotides. The method is used for the coupling of a
CC phosphoramidite nucleoside to a solid support-bound nucleoside,
CC particularly in the large-scale synthesis of oligonucleotides using the
CC phosphoramidite method. The oligonucleotides can be used in diagnostic,
CC research and therapeutic applications, e.g., as probes, primers, linkers,
CC adapters and antisense oligonucleotides. The use of acetonitrile having a
CC water content of 30-1250 ppm as compared to conventional methods using
CC lower water content acetonitrile (at most 30 ppm) provides more
CC economical synthesis without reduced efficiency of oligonucleotide
CC synthesis. Sequences AA14471-AA14474 represent oligonucleotides
CC synthesised using the process of the invention
XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAGAGATCAAAACG 149
DB 21 CGCAAGAGAGAGCAAAACG 2

RESULT 328
AAZ57151/c
ID AAZ57151 standard; DNA; 21 BP.
XX
AC AAZ57151;
DT 03-APR-2000 (first entry)
DE Phosphorothioate 21-mer oligonucleotide #3.
XX
XX Phosphorothioate; activator; oligonucleotide synthesis; phosphoramidite;
XX phosphorylating reagent; ss.
OS Synthetic.

Key Location/Qualifiers
FT modified_base 1..21
FT /*tag= a
FT /*note= "phosphorothioate linkages"

XX WO9962922-A1.
XX 09-DEC-1999.
XX 02-JUN-1999; 99WO-US012251.
XX 02-JUN-1998; 98US-0087757P.
XX 23-OCT-1998; 98US-00177953.
XX (ISIS-) ISIS PHARM INC.
XX Sanghvi Y, Manoharan M, Ravikumar VT;
XX WPI; 2000-097311/08.
XX
XX Preparation of nucleoside phosphoramidites and oligonucleotides.
XX
XX Example 20; Page 81; 153pp; English.

XX The present invention describes nucleoside phosphoramidites and
XX oligonucleotides (ON's) prepared using pyridinium, imidazolium or
XX benzimidazolium salts as activators. The preparation of a phosphorylated
XX compound comprises reacting a compound having a hydroxyl group with a
XX phosphorylating reagent in the presence of a pyridinium salt in a
XX solvent. The phosphoramidites are useful as building blocks for synthesis
XX of oligonucleotides, which are potentially useful in therapeutic and
XX diagnostic applications. The activators can be produced in situ by mixing

CC pyridine and an acid, producing benefits in large scale synthesis.
CC Compared with conventional activators, e.g. 1H tetrazole, the pyridinium
CC salts, and materials necessary for their generation in situ, are non-
CC explosive and easier to store, and also cheaper and have higher
CC solubility in organic solvents. Final purity of the phosphorylated
CC material results from use of a less acidic reaction medium and a
CC pyridinium salts are used. The present sequence represents a
CC phosphorothioate 21-mer oligonucleotide, the synthesis of which is
CC described in an example from the present invention
XX

SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAGAGATCAAAACG 149
DB 21 CGCAAGAGAGAGCAAAACG 2

RESULT 329
AA94541/c
ID AAA94541 standard; DNA; 21 BP.
XX
AC AAA94541;
DT 10-JAN-2001 (first entry)
DE Example biologically active oligonucleotide #3.
XX
XX Oligonucleotide; non-parenteral; multi-particulate; phosphorothioate; ss.
OS Synthetic.

Key Location/Qualifiers
FT modified_base 1..21
FT /*tag= a
FT /*mod_base= OTHER
FT /*note= "Phosphorothioate internucleotide linkage"

XX WO200050050-A1.
XX 31-AUG-2000.
XX 23-FEB-2000; 2000WO-US004662.
XX 23-FEB-1999; 99US-00256515.
XX (ISIS-) ISIS PHARM INC.
XX Hardee GE, Tillman LG, Mehta RC, Teng C;
XX WPI; 2000-572032/53.
XX
XX Non-parenteral multi-particulate formulations comprise biologically
XX active substances bound to carrier particles for delivery across mucosal
XX membranes.
XX
XX Claim 4; Page 8; 38pp; English.

XX The present invention relates to non-parenteral multi-particulate
XX formulations for transporting agents (for example therapeutic) across
XX mucosal membranes. The formulations comprise carrier particles bound with
XX a biologically active agent and a penetration enhancer. The formulations
XX associate with buccal, nasal, pulmonary, gastrointestinal and vaginal
XX mucosal membranes to transport the biologically active agents to the
XX lymph system, blood system or epithelial tissue of the subject. The
XX formulation is administered orally which is preferred by patients. The
XX present sequence is an example oligonucleotide that may be used in the
XX formulation

SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 130 CGGATGAAGAGATCAACG 149
DB 21 CGCAGAGAGAGCAACG 2

RESULT 330
AAA94544/C
ID AAA94544 standard; DNA; 21 BP.
XX AC AAA94544;
XX
DT 10-JAN-2001 (first entry)
XX
DE Example biologically active oligonucleotide #6.
XX
KW Oligonucleotide; non-parenteral; multi-particulate; phosphorothioate;
KW 2'-O-methoxyethyl; 5-methylcytidine; ss.
XX OS Synthetic.
XX

Key Location/Qualifiers
FH modified_base 1..21
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate internucleotide linkage"
FT modified_base 1..7
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl nucleoside"
FT modified_base 2
FT /*tag= c
FT /mod_base= m5C
FT modified_base 8
FT /*tag= d
FT /mod_base= m5C
FT modified_base 10
FT /*tag= e
FT /mod_base= m5C
FT modified_base 13
FT /*tag= f
FT /mod_base= m5C
FT modified_base 15..20
FT /*tag= g
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl nucleoside"
FT modified_base 16
FT /*tag= h
FT /mod_base= m5C
FT modified_base 20
FT /*tag= i
FT /mod_base= m5C
XX
XX WO2000050050-A1.
XX
XX 31-AUG-2000.
XX
XX 23-FEB-2000; 2000WO-US004662.
XX
XX 23-FEB-1999; 99US-00256515.
XX (ISIS-) ISIS PHARM INC.
XX PA Hardee GE, Tillman LG, Mehta RC, Teng C;
XX PI WPI; 2000-572032/53.
XX
XX Non-parenteral multi-particulate formulations comprise biologically
PT active substances bound to carrier particles for delivery across mucosal

PT membranes.
XX
PS Claim 4; Page 8; 38pp; English.
XX
CC The present invention relates to non-parenteral multi-particulate
CC formulations for transporting agents (for example therapeutic) across
CC mucosal membranes. The formulations comprise carrier particles bound with
CC a biologically active agent and a penetration enhancer. The formulations
CC associate with buccal, nasal, pulmonary, gastrointestinal and vaginal
CC mucosal membranes to transport the biologically active agents to the
CC lymph system, blood system or epithelial tissue of the subject. The
CC formulation is administered orally which is preferred by patients. The
CC present sequence is an example oligonucleotide that may be used in the
CC formulation
XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 130 CGGATGAAGAGATCAACG 149
DB 21 CGCAGAGAGAGCAACG 2

RESULT 331
AAF60903/C
ID AAF60903 standard; DNA; 21 BP.
XX
XX AAF60903;
XX
XX 15-MAY-2001 (first entry)
XX
XX Anti-CMV oligonucleotide SEQ ID 12.
XX
XX Transport; membrane; cytostatic; virucide; vasotropic; dermatological;
XX antipsoriatic; antiasthmatic; gene therapy; tumor cell; antisense;
XX tumor therapy; drug; ss.
XX Unidentified.
XX DE19935302-A1.
XX
XX 08-FEB-2001.
XX
XX 28-JUL-1999; 99DE-01035302.
XX
XX 28-JUL-1999; 99DE-01035302.
XX (AVET) AVENTIS PHARMA DEUT GMBH.
XX Uhlmann E, Greiner B, Unger E, Gothe G, Schwerdel M;
XX WPI; 2001-203679/21.
XX
XX New substituted aryl conjugates of parent molecules, especially
PT oligonucleotides, having improved transmembrane and intracellular
PT transport properties, useful as medicaments or diagnostic agents.
XX
XX Disclosure; Page 6; 28pp; German.
XX
XX This invention describes a novel conjugate (I) which consists of (A) a
CC molecule to be transported and (B) at least one aryl residue of formula -
CC Ar-(X-C(Y)-R₁)_n (II). Ar = group containing at least one aromatic ring;
CC X = O or N (sic); Y = O, S or NH-R₂ (sic); R₁ = optionally substituted
CC 1-23C alkyl (optionally containing double and/or triple bonds); R₂ =
CC optionally substituted 1-18C alkyl (optionally containing double and/or
CC triple bonds); n = integer of 1 or more. (A) is bonded to (B) directly or
CC via a chemical group, provided that the chemical group is other than CH₂
CC -S if the bond is via a phosphodiester linkage of (A). The invention also
CC describes (I) the preparation of a conjugate (I') of (A') a molecule to
CC be transported and (B') at least one aryl residue (not restricted to

CC (II)), by preparing (A') containing a reactive function at the position
CC at which (B') is to be bonded, preparing (B') and reacting (A') and (B');
CC and (ii) the use of aryl groups (II) (optionally bonded via a chemical
CC group) for transporting (A) across biological membranes. The products of
CC the invention have cytostatic, virucide, vasotropic, dermatological,
CC antipsoriatic and antiasthmatic activity and can be used for gene
CC therapy. Conjugation of (A) with (B) is useful for transporting (A)
CC across biological membranes or into eukaryotic or prokaryotic cells
CC (specifically bacterial, yeast or mammalian cells, including human cells,
CC particularly tumor cells). Medicaments, diagnostic agents and test kits
CC containing (II) are also claimed. Typically (II) are antisense
CC oligonucleotide derivatives for tumor therapy; oligonucleotide drugs for
CC treating viral infections or diseases associated with integrins or cell-
CC cell interactions (e.g. restenosis, vitiligo, psoriasis or asthma); or
CC labeled oligonucleotides for in vivo diagnostic use, e.g. by in situ
CC hybridization. Conjugation with (B) markedly improves the cellular uptake
CC of (A), e.g. in tumor cells. (B) include fluorescein derivative residues,
CC in which case the conjugates (I) are fluorescently labeled, allowing
CC microscopic monitoring of cellular uptake etc. The cellular uptake of (I)
CC is superior to that obtained using other conjugated groups related to
CC (II), e.g. oligonucleotides conjugated with fluorescein diacetate (within
CC the scope of (B)) have superior uptake to corresponding fluorescein
CC conjugates
XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149
DB 21 CGCAAGAAGAAGCAACG 2

RESULT 332
AAF97221
ID AAF97221 standard; DNA; 21 BP.
XX AC AAF97221;
XX DT 06-JUN-2001 (first entry)
XX DE Human gene single nucleotide polymorphism #1982.
XX KW Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
KW polymorphism; vascular disease; coronary artery disease; forensics;
KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
KW pulmonary embolism; paternity test; ds.
XX OS Homo sapiens.

XX FH Key Location/Qualifiers
XX FT Variation replace(11,G)
XX FT /*tag= a
XX FT /standard_name= "single nucleotide polymorphism"

XX PN WC200118250-A2.
XX PD 15-MAR-2001.
XX PF 07-SEP-2000; 2000WO-US024503.
XX PR 10-SEP-1999; 99US-0153357P.
XX PR 26-JUL-2000; 2000US-0220947P.
XX PR 16-AUG-2000; 2000US-0225724P.
XX PA (WHED) WHITEHEAD INST BIOMEDICAL RES.
XX PA (MILL-) MILLENNIUM PHARM INC.
XX PI Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JJ;
XX WPI; 2001-226749/23.

XX Nucleic acids comprising single nucleotide polymorphisms, useful in
PT applications such as forensics, paternity testing, medicine, genetic
PT analysis and phenotype correlations to diseases such as diabetes and
PT atherosclerosis.
XX Example; Page 183; 242pp; English.
XX The present invention provides a method of diagnosing a vascular disease
CC in an individual, involving determining the sequence at various
CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4
CC genes. The sequences at a number of polymorphic sites are also provided
CC in the specification. In particular, the method can be used in the
CC diagnosis of atherosclerosis, myocardial infarction, coronary heart
CC disease, stroke, peripheral vascular diseases, venous thromboembolism and
CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
CC useful in forensics, paternity testing, genetic analysis and phenotype
CC correlations to diseases. The present sequence is an example of one of
CC the human gene SNPs shown in the specification
XX
SQ Sequence 21 BP; 7 A; 2 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1507 ATATTTCGACTAAAGGAGAT 1526
DB 2 ATATTTCGACTAAAGGAGAT 21

RESULT 333
AAF95371
ID AAF95371 standard; DNA; 21 BP.
XX AC AAF95371;
XX DT 06-JUN-2001 (first entry)
XX DE Human gene single nucleotide polymorphism #132.
XX KW Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
KW polymorphism; vascular disease; coronary artery disease; forensics;
KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
KW pulmonary embolism; paternity test; ds.
XX OS Homo sapiens.

XX FH Key Location/Qualifiers
XX FT Variation replace(11,T)
XX FT /*tag= a
XX FT /standard_name= "single nucleotide polymorphism"

XX PN WC200118250-A2.
XX PD 15-MAR-2001.
XX PF 07-SEP-2000; 2000WO-US024503.
XX PR 10-SEP-1999; 99US-0153357P.
XX PR 26-JUL-2000; 2000US-0220947P.
XX PR 16-AUG-2000; 2000US-0225724P.
XX PA (WHED) WHITEHEAD INST BIOMEDICAL RES.
XX PA (MILL-) MILLENNIUM PHARM INC.
XX PI Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JJ;
XX WPI; 2001-226749/23.

XX Nucleic acids comprising single nucleotide polymorphisms, useful in
PT applications such as forensics, paternity testing, medicine, genetic
PT analysis and phenotype correlations to diseases such as diabetes and

```
PT atherosclerosis.
XX Example; Page 57; 242pp; English.
CC
CC The present invention provides a method of diagnosing a vascular disease
CC in an individual, involving determining the sequence at various
CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4
CC genes. The sequences at a number of polymorphic sites are also provided
CC in the specification. In particular, the method can be used in the
CC diagnosis of atherosclerosis, myocardial infarction, coronary heart
CC disease, stroke, peripheral vascular diseases, venous thromboembolism and
CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
CC useful in forensics, paternity testing, genetic analysis and phenotype
CC correlations to diseases. The present sequence is an example of one of
CC the human gene SNPs shown in the specification
XX
SQ Sequence 21 BP; 6 A; 6 C; 8 G; 1 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 1267 ACTGAGGAGACGTGGCCAGG 1286
Db 2 ACAGAGAGACGTGGCCCGG 21
RESULT 334
AAH46453/C
ID AAH46453 standard; DNA; 21 BP.
XX
AC AAH46453;
XX
XX
DT 14-SEP-2001 (first entry)
DE Oligonucleotide #3.
XX
KW Phosphorothioate; anti-viral therapy; stereochemical pathway; ss.
XX
OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..21
FT /*tag= a
FT /mod_base= OTHER
FT /note= "All bases are phosphorothioate"
XX
XX US6242591-B1.
XX
XX 05-JUN-2001.
XX
XX 11-JAN-2000; 2000US-00481486.
XX
XX 15-OCT-1997; 97US-00950779.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Cole DL, Ravikumar VT, Cheruvallath ZS;
XX WPI; 2001-407218/43.
XX
XX Preparing sulfurized 2' substituted phosphorothioate oligonucleotides
XX useful in biological research, comprises phosphorylating the 5'-hydroxyl
XX of a nucleic acid having a nucleoside with a 2' modification.
XX
XX Example 5; Col 6; 7pp; English.
XX
XX The present invention relates to a method for preparing phosphorothioate
XX oligonucleotides having at least one nucleoside with a 2' modification.
XX The method comprises phosphorylating the 5'-hydroxyl of a nucleic acid
XX group having at least one nucleoside with a 2' modification in an
XX acetonitrile. The present sequence was used to illustrate the method of
XX the present invention. The method is useful for synthesising sulphurised
CC
CC 2' substituted phosphorothioate oligonucleotides, which may be used in
CC molecular biological research, in applications such as anti-viral
CC therapy, and for determining the stereochemical pathways of certain
CC enzymes which recognise nucleic acids
XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 130 CGGATGAAGAGATCAACG 149
Db 21 CGCAAGAGAGAGCAACG 2
RESULT 335
AAC88207/C
ID AAC88207 standard; DNA; 21 BP.
XX
AC AAC88207;
XX
XX 01-MAR-2001 (first entry)
XX
DE Modified phosphorothioate 21-mer SEQ ID NO: 3.
XX
KW Phosphorothioate oligomer; diagnosis; therapy; disease; AIDS;
KW atherosclerosis; ss.
XX
OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..21
FT /*tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone"
XX
XX WO200068241-A1.
XX
XX 16-NOV-2000.
XX
XX 05-MAY-2000; 2000WO-US012447.
XX
XX 06-MAY-1999; 99US-00306278.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Ravikumar VT, Capaldi DC, Cole DT;
XX WPI; 2001-049743/06.
XX
XX Preparation of oligonucleotides useful in diagnostics using
XX phosphoramidite compositions.
XX
XX Example 7; Page 44; 75pp; English.
XX
XX The present invention provides novel compositions comprising
XX phosphoramidite compounds which can be used to synthesise modified
XX oligonucleotides. These modified oligonucleotides have phosphorothioate
XX backbones. They can be used to produce probes, primers, linkers, adaptors
XX and gene fragments and in disease diagnosis and therapy, for example in
XX the treatment of AIDS and atherosclerosis
XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 130 CGGATGAAGAGATCAACG 149
Db 21 CGCAAGAGAGAGCAACG 2
```



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AC  ABA97455;
XX
XX  16-APR-2002 (first entry)
XX
XX  CMV targeted antisense peptide nucleic acid SEQ ID NO: 1.
XX
XX  Peptide nucleic acid; PNA; polyamide backbone; phosphoryl radical;
XX  cytosatic; virucide; dermatological; antiasthmatic; cancer; antisense;
XX  viral infection; vitiligo; pigmentation disorder; asthma; ss.
XX
XX  Unidentified.
XX  OS
XX  Synthetic.
XX
XX  WO200179249-A2.
XX
XX  25-OCT-2001.
XX
XX  07-APR-2001; 2001WO-EP004027.
XX
XX  18-APR-2000; 2000DE-01019136.
XX
XX  (AVET ) AVENTIS PHARMA DEUT GMBH.
XX
XX  Uhlmann E, Breipohl G, Will DW;
XX
XX  WPI; 2002-089643/12.
XX
XX  New peptide nucleic acid derivatives, useful e.g. for treating tumors and
XX  diagnosis, have N-terminal phosphoryl residue for improving e.g.
XX  solubility in water.
XX
XX  Disclosure; Page 74; 96pp; German.
XX
XX  The present invention relates to peptide nucleic acid (PNA) derivatives.
XX  These can be used in the treatment of cancer, viral infections, vitiligo
XX  or other pigmentation disorders, and asthma. The present sequence is an
XX  oligonucleotide fragment of a PNA described in the exemplification of the
XX  invention
XX
XX  Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
XX
XX  Query Match 0.9%; Score 15.2; DB 1; Length 21;
XX  Best Local Similarity 85.0%; Pred. NO. 5e+02; 3; Indels 0; Gaps 0;
XX  Matches 17; Conservative 0; Mismatches 3;
XX
QY 130 CGGATGAAGAAGATCAACG 149
Db 11 ||||| |||||
21 CGCAAGAAGAAGACCAACG 2
XX
RESULT 338
ID ABK99295/c
XX
XX ABK99295 standard; RNA; 21 BP.
XX
XX ABK99295;
XX
XX 21-OCT-2002 (first entry)
XX
XX Hepatitis C virus (HCV) NS5B replicase RNA synthesis template #25.
XX
XX Hepatitis C virus; HCV; NS5B replicase; ss; RNA polymerase.
XX
XX Synthetic.
XX
XX US2002064771-A1.
XX
XX 30-MAY-2002.
XX
XX 06-APR-2001; 2001US-00828034.
XX
XX 07-APR-2000; 2000US-0195852P.
XX
XX (ZHON/) ZHONG W.

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```
PA (COLE-) COLEY PHARM GROUP LTD.
XX
XX Schetter C, Vollmer J;
XX
XX WPI; 2002-723213/78.
XX
XX New compositions comprising CpG-like immunostimulatory nucleic acids,
XX useful for treating or preventing infectious diseases, cancer, allergy,
XX asthma, immunodeficiency, anemia, thrombocytopenia or neutropenia.
XX
XX Example 1; Page 89; 148pp; English.
XX
XX The present sequence is that of antisense oligonucleotide (ODN) 5114
XX (Formiversen 1312 ISIS), which was used in an example of the invention
XX in which methylated CpG-like oligonucleotides were compared with
XX unmethylated ODNs for their immunostimulant activity. ODN 5114 exhibited
XX significant stimulatory capability on human B cells, and its
XX corresponding methylated form, ODN 5154 (see ABV73950) also induced
XX stimulation, although to a lesser extent. Methylated CpG, CpI and ZpI
XX ODNs of the invention (see ABV73935-37) are useful for inducing an immune
XX response in a subject, including humans, for the treatment or prevention
XX of an infectious disease, cancer, allergy or asthma, for enhancing or
XX stimulating bone marrow proliferation in an immunodeficiency,
XX particularly in a subject undergoing chemotherapy, for enhancing
XX erythropoiesis in anaemia, for enhancing thrombopoiesis in
XX thrombocytopenia, for enhancing neutrophil proliferation in
XX neutropenia, and for inducing cytokine (e.g. interleukin (IL)-1 beta, IL
XX -2, IL-6, IL-12, IL-18, TNF, interferon-alpha or interferon-gamma)
XX production (all claimed)
XX
XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 5e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 130 CGGATGAGAGATCAACG 149
XX ||| ||||| ||||| |||||
XX Db 21 CGCAGAGAGAGACCAACG 2
XX
XX RESULT 341
XX ABV73950/c
XX ID ABV73950 standard; DNA; 21 BP.
XX
XX AC ABV73950;
XX
XX DT 13-JAN-2003 (first entry)
XX
XX DE Methylated antisense oligonucleotide 5154.
XX
XX KW Immunostimulant; infection; allergy; asthma; cancer; anaemia;
XX thrombocytopenia; neutropenia; antimicrobial; antiasthmatic;
XX cytostatic; antianaemic; antiallergic; haemostatic; antisense;
XX phosphorothioate; ss.
XX
XX OS Synthetic.
XX
XX PH Key Location/Qualifiers
XX FT modified_base 1..21
XX FT /tag= a
XX FT /mod_base= OTHER
XX FT /note= "phosphorothioate linkage"
XX FT modified_base 2
XX FT /tag= b
XX FT /mod_base= m5c
XX FT modified_base 8
XX FT /tag= c
XX FT /mod_base= m5c
XX FT modified_base 10
XX FT /tag= d
XX FT /mod_base= m5c
XX FT modified_base 13
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FT /*tag= e
FT /mod_base= m5c
FT modified_base 16
FT /*tag= f
FT /mod_base= m5c
FT modified_base 20
FT /*tag= g
FT /mod_base= m5c
XX WO200269369-A2.
XX
XX PD 06-SEP-2002.
XX
XX PF 10-DEC-2001; 2001WO-IB002898.
XX
XX PR 08-DEC-2000; 2000US-0254341P.
XX
XX PA (COLE-) COLEY PHARM GROUP LTD.
XX
XX PI Schetter C, Vollmer J;
XX WPI; 2002-723213/78.
XX
XX PT New compositions comprising CpG-like immunostimulatory nucleic acids,
XX useful for treating or preventing infectious diseases, cancer, allergy,
XX asthma, immunodeficiency, anemia, thrombocytopenia or neutropenia.
XX
XX PS Example 1; Page 89; 148pp; English.
XX
XX CC The present sequence is that of methylated oligonucleotide (ODN) 5154, a
XX methylated version of antisense ODN 5114 (see ABV73946), which was used
XX in an example of the invention in which methylated CpG-like ODNs were
XX compared with unmethylated ODNs for their immunostimulant activity. ODN
XX 5114 exhibited significant stimulatory capability on human B cells. ODN
XX 5154 also induced stimulation, although to a lesser extent. Methylated
XX CpG, CpI and ZpY ODNs of the invention (see ABV73935-37) are useful for
XX inducing an immune response in a subject, including humans, for the
XX treatment or prevention of an infectious disease, cancer, allergy or
XX asthma, for enhancing or stimulating bone marrow proliferation in an
XX immunodeficiency, particularly in a subject undergoing chemotherapy, for
XX enhancing erythropoiesis in anaemia, for enhancing thrombopoiesis in
XX thrombocytopenia, for enhancing neutrophil proliferation in
XX neutropenia, and for inducing cytokine (e.g. interleukin (IL)-1 beta, IL
XX -2, IL-6, IL-12, IL-18, TNF, interferon-alpha or interferon-gamma)
XX production (all claimed)
XX
XX SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 5e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 130 CGGATGAGAGATCAACG 149
XX ||| ||||| ||||| |||||
XX Db 21 CGCAGAGAGAGACCAACG 2
XX
XX RESULT 342
XX ABL90981/c
XX ID ABL90981 standard; DNA; 21 BP.
XX
XX AC ABL90981;
XX
XX DT 27-MAY-2002 (first entry)
XX
XX DE Cytomegalovirus (CMV) treatment oligonucleotide.
XX
XX KW PKC antisense oligonucleotide; protein kinase C; PKC; PKC-alpha;
XX PKC-beta type I; PKC-beta type II; PKC-gamma; PKC-delta; PKC-epsilon;
XX PKC-eta; PKC-epsilon; PKC expression modulation; ss;
XX hyperproliferative condition; tumour; glioblastoma; bladder cancer;
XX breast cancer; colon cancer; lung cancer; inflammatory condition;
XX psoriasis; phosphorothioate backbone; hepatitis C virus; HCV; ICAM-1;
```

XX cytomagalovirus; CMV.
XX Unidentified.
XX US6339066-B1.
XX 15-JAN-2002.
XX 31-MAR-1997; 97US-00829637.
XX 11-JAN-1990; 90US-004633358.
XX 13-AUG-1990; 90US-00566977.
XX 11-JAN-1991; 91MO-US000243.
XX 15-OCT-1991; 91US-00777760.
XX 16-OCT-1991; 91US-00777707.
XX 16-MAR-1992; 92US-00852852.
XX 05-MAY-1993; 93US-00059023.
XX 09-JUL-1993; 93US-00089996.
XX 29-AUG-1994; 94US-00297703.
XX 07-JUN-1995; 95US-00481066.
XX (ISIS-) ISIS PHARM INC.
XX Bennett CF, Dean NM, Cook PD, Hoke G;
XX WPI; 2002-215022/27.
XX New antisense oligonucleotide having nucleoside units which specifically
XX binds mRNA encoding human protein kinase C isoform, useful for treating
XX hyperproliferative and inflammatory diseases e.g. psoriasis, tumor and
XX cancer.
XX Example 19; Col 25; 77pp; English.
XX The invention comprises antisense oligonucleotides designed to bind mRNA
XX encoding a human protein kinase C (PKC) isoform (i.e. PKC-alpha, PKC-beta
XX type I, PKC-beta type II, PKC-gamma, PKC-delta, PKC-epsilon, PKC-zeta
XX and PKC-eta). The antisense oligonucleotides of the invention are useful
XX for modulating the expression of the PKC isoforms. The antisense
XX oligonucleotides are useful for treating hyperproliferative conditions
XX (e.g. tumor, glioblastoma, bladder cancer, breast cancer, colon cancer
XX and lung cancer), and inflammatory conditions (e.g. psoriasis). The
XX antisense oligonucleotides of the invention are also useful for detection
XX and diagnosis of PKC expression. The present sequence represents an
XX antisense oligonucleotide described in the invention. NOTE: The present
XX sequence contains a phosphorothioate backbone
XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02; 3; Indels 0; Gaps 0;
Matches 17; Conservative 0; Mismatches 0;
QY 130 CGGATGAAGAGATCAACG 149
DB 21 CGCAAGAGAGAGCAACG 2
RESULT 343
ABK69603/c
ID ABK69603 standard; DNA; 21 BP.
AC ABK69603;
XX 15-JUL-2002 (first entry)
XX Novel G protein-coupled receptor, PCR primer #3.
XX G protein coupled receptor; nontropic; neuroprotective; cytostatic;
XX transgenic; central nervous system disorder; endocrine disorder;
XX metabolic disease; cancer; gene therapy; colocalization; primer; ss.
XX Homo sapiens.

XX WO200231145-A1.
XX 18-APR-2002.
XX 12-OCT-2001; 2001WO-JP008977.
XX 13-OCT-2000; 2000JP-00313533.
XX 16-NOV-2000; 2000JP-00350057.
XX (TAKE) TAKEDA CHEM IND LTD.
XX Sato S, Shintani Y, Miyajima N, Yoshimura K;
XX WPI; 2002-362679/39.
XX New human colocalization-originated G protein-coupled receptor protein for
XX developing drugs e.g. with transgenic animals to treat diseases of the
XX central nervous system, endocrine diseases and cancer.
XX Example 2; Page 168; 210pp; Japanese.
XX The invention relates to a novel colocalization-originated G protein-
XX coupled receptor protein. The protein and encoded DNAs are for diagnosis
XX and developing drugs e.g. with transgenic animals to treat diseases of
XX the central nervous system, endocrine and metabolic diseases, and cancer,
XX including by gene therapy. ABK69599-ABK69646 represent G protein-coupled
XX receptor protein coding sequences and related primers of the invention
XX Sequence 21 BP; 5 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02; 3; Indels 0; Gaps 0;
Matches 17; Conservative 0; Mismatches 0;
QY 396 TGAGGTGCAGTCTCCAGTGA 415
DB 21 TGCCGTGAAGTCTCCAGTGA 2
RESULT 344
ABK69614/c
ID ABK69614 standard; DNA; 21 BP.
AC ABK69614;
XX 15-JUL-2002 (first entry)
XX Novel G protein-coupled receptor, PCR primer #10.
XX G protein coupled receptor; nontropic; neuroprotective; cytostatic;
XX transgenic; central nervous system disorder; endocrine disorder;
XX metabolic disease; cancer; gene therapy; colocalization; primer; ss.
XX Synthetic.
XX WO200231145-A1.
XX 18-APR-2002.
XX 12-OCT-2001; 2001WO-JP008977.
XX 13-OCT-2000; 2000JP-00313533.
XX 16-NOV-2000; 2000JP-00350057.
XX (TAKE) TAKEDA CHEM IND LTD.
XX Sato S, Shintani Y, Miyajima N, Yoshimura K;
XX WPI; 2002-362679/39.
XX New human colocalization-originated G protein-coupled receptor protein for
XX developing drugs e.g. with transgenic animals to treat diseases of the

CC The present invention describes a delayed release oral formulation (A),
 CC giving enhanced gastrointestinal (GI) absorption of a drug (I). (A)
 CC comprises a first set of particles containing (I) and a penetration
 CC enhancer (II) and a second set of particles containing (II) in a delayed
 CC release coating or matrix (III). (A) is used for enhancing the absorption
 CC of (I) in mammals, especially humans. Typical disorders to be treated
 CC include ulcerative colitis, rheumatoid arthritis, Crohn's disease,
 CC inflammatory bowel disease and abnormal cellular proliferation. When the
 CC particles release (I) and (II) at a first location in the GI tract
 CC (generally the intestines), (II) is rapidly absorbed (during a first
 CC release pulse) and is often present in insufficient amount to promote
 CC absorption of the entire dose of (I). This problem is solved by providing
 CC further (II) in delayed release form in the particles, so that absorption
 CC of (I) is completed in a second pulse. The present sequence represents an
 CC exemplary oligonucleotide from the present invention which inhibits HCV
 XX

SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 5e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149
 DB 21 CGCAGAAGAAGCAACG 2

RESULT 352
 ACC68813/c
 ID ACC68813 standard; DNA; 21 BP.
 AC ACC68813;
 AC ACC68813;
 DT 02-JUL-2003 (first entry)
 XX Human TGR23-2 PCR primer SEQ ID NO:9.
 DE
 XX G protein-coupled receptor; GPCR; TGR23-1; TGR23; anorectic;
 XX cytosstatic; obesity disorder; cancer; appetite stimulation; PCR primer;
 KW ss.
 KW Homo sapiens.
 OS Synthetic.
 OS
 XX WO2003025179-A1.
 XX 27-MAR-2003.
 XX 13-SEP-2002; 2002WO-JP009446.
 XX 14-SEP-2001; 2001JP-00279232.
 PR 12-OCT-2001; 2001JP-00315148.
 PR 10-APR-2002; 2002JP-00108621.
 PR 10-JUN-2002; 2002JP-00169232.
 XX (TAKE) TAKEDA CHEM IND LTD.
 XX Mori M, Hayashi K, Miya H, Sato S, Kitada C, Matsumoto H;
 PI Nagi T, Shimomura Y;
 PI WPI; 2003-313356/30.
 XX Polypeptides binding to G-protein coupled receptors TGR23-1 and TGR23-2
 PT for prevention and treatment of obesity, cancer and appetite disorders.
 XX Example 2; Page 245; 338pp; Japanese.
 XX The present invention describes polypeptides (I) and their amides, esters
 CC and salts which bind to the human G protein-coupled receptor (GPCR)
 CC proteins TGR23-1 and TGR23-2. TGR23 proteins have anorectic and
 CC cytosstatic activities. (I) can be used in the treatment, prevention and
 CC diagnosis of obesity disorders and cancer (including cancer of the
 CC intestines, colon, breast, lung (including non-small cell lung cancer),
 CC prostate, oesophagus, stomach, liver, pancreas, kidney, womb, ovary,
 CC testis, bladder and brain, and blood cancers). (I) can also be used in
 CC appetite stimulation. ACC68807 to ACC68890 and ABP97241 to ABP97280
 CC represent sequences used in the exemplification of the present invention
 PS Example 2; Page 245; 338pp; Japanese.
 XX The present invention describes polypeptides (I) and their amides, esters
 CC and salts which bind to the human G protein-coupled receptor (GPCR)
 CC proteins TGR23-1 and TGR23-2. TGR23 proteins have anorectic and
 CC cytosstatic activities. (I) can be used in the treatment, prevention and
 CC diagnosis of obesity disorders and cancer (including cancer of the
 CC intestines, colon, breast, lung (including non-small cell lung cancer),

CC prostate, oesophagus, stomach, liver, pancreas, kidney, womb, ovary,
 CC testis, bladder and brain, and blood cancers). (I) can also be used in
 CC appetite stimulation. ACC68807 to ACC68890 and ABP97241 to ABP97280
 CC represent sequences used in the exemplification of the present invention
 XX

SQ Sequence 21 BP; 5 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 5e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 396 TGAGGTGCAGTCTCCAGTGA 415
 DB 21 TCCTGTGAGTCTCCAGTGA 2

RESULT 353
 ACC68881/c
 ID ACC68881 standard; DNA; 21 BP.
 XX ACC68881;
 AC ACC68881;
 AC ACC68881;
 DT 02-JUL-2003 (first entry)
 XX Human GPCR TGR23-2 PCR primer SEQ ID NO:115.
 DE
 XX G protein-coupled receptor; GPCR; TGR23-1; TGR23; anorectic;
 XX cytosstatic; obesity disorder; cancer; appetite stimulation; PCR primer;
 KW ss.
 KW Homo sapiens.
 OS Synthetic.
 OS
 XX WO2003025179-A1.
 XX 27-MAR-2003.
 XX 13-SEP-2002; 2002WO-JP009446.
 XX 14-SEP-2001; 2001JP-00279232.
 PR 12-OCT-2001; 2001JP-00315148.
 PR 10-APR-2002; 2002JP-00108621.
 PR 10-JUN-2002; 2002JP-00169232.
 XX (TAKE) TAKEDA CHEM IND LTD.
 XX Mori M, Hayashi K, Miya H, Sato S, Kitada C, Matsumoto H;
 PI Nagi T, Shimomura Y;
 PI WPI; 2003-313356/30.
 XX Polypeptides binding to G-protein coupled receptors TGR23-1 and TGR23-2
 PT for prevention and treatment of obesity, cancer and appetite disorders.
 XX Example 39; Page 327; 338pp; Japanese.
 XX The present invention describes polypeptides (I) and their amides, esters
 CC and salts which bind to the human G protein-coupled receptor (GPCR)
 CC proteins TGR23-1 and TGR23-2. TGR23 proteins have anorectic and
 CC cytosstatic activities. (I) can be used in the treatment, prevention and
 CC diagnosis of obesity disorders and cancer (including cancer of the
 CC intestines, colon, breast, lung (including non-small cell lung cancer),
 CC prostate, oesophagus, stomach, liver, pancreas, kidney, womb, ovary,
 CC testis, bladder and brain, and blood cancers). (I) can also be used in
 CC appetite stimulation. ACC68807 to ACC68890 and ABP97241 to ABP97280
 CC represent sequences used in the exemplification of the present invention
 PS Example 39; Page 327; 338pp; Japanese.
 XX The present invention describes polypeptides (I) and their amides, esters
 CC and salts which bind to the human G protein-coupled receptor (GPCR)
 CC proteins TGR23-1 and TGR23-2. TGR23 proteins have anorectic and
 CC cytosstatic activities. (I) can be used in the treatment, prevention and
 CC diagnosis of obesity disorders and cancer (including cancer of the
 CC intestines, colon, breast, lung (including non-small cell lung cancer),
 CC prostate, oesophagus, stomach, liver, pancreas, kidney, womb, ovary,
 CC testis, bladder and brain, and blood cancers). (I) can also be used in
 CC appetite stimulation. ACC68807 to ACC68890 and ABP97241 to ABP97280
 CC represent sequences used in the exemplification of the present invention
 PS Example 39; Page 327; 338pp; Japanese.
 XX

Query Match 0.9%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 5e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 396 TGAGGTGCAGTCTCCAGTGA 415
Db 21 TGCCGGAAGATCTCCAGTGA 2

RESULT 354

ACC49160/c
ID ACC49160 standard; DNA; 21 BP.

XX ACC49160;

XX 19-JUN-2003 (first entry)

DE HCMV inhibitory antisense oligonucleotide SEQ ID NO:3.

XX Inhibition: antisense oligonucleotide; phosphorothioate; bioadhesive;
KW enhanced mucosal drug absorption; antiulcer; antiinflammatory; cancer;
KW antihemmatic; antiarthritic; cytostatic; ulcerative colitis; tumour;
KW rheumatoid arthritis; Crohn's disease; inflammatory bowel disease;
KW cellular proliferation; ss.

XX Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..21

FT /*tag= a

FT /mod_base= OTHER

FT /note= "phosphorothioate linkages"

XX WO2003018134-A2.

XX 06-MAR-2003.

XX 22-AUG-2002; 2002WO-US026925.

XX 22-AUG-2001; 2001US-00935316.

XX (ISIS-) ISIS PHARM INC.

XX Teng C, Weinbach SP, Tillman LG, Geary RS, Hardee GE;

XX WPI; 2003-342432/32.

XX Oral pharmaceutical formulation for delivering bioactive macromolecule
PT to mucosal surface, contains drug, bioadhesive compound, and penetration
PT enhancer.

XX Disclosure; Page 28; 62pp; English.

XX The present invention describes an oral pharmaceutical formulation (I)
CC for delivering a bioactive macromolecule to a mucosal surface. (I)
CC comprises a first population of carrier particles comprising drug and a
CC bioadhesive compound; and a second population of carrier particles
CC comprising a penetration enhancer. Also described is a method for
CC enhancing the mucosal absorption of the bioactive macromolecule in a
CC mammal (preferably a human) by mucosally administering (I). (I) has
CC antiulcer, antiinflammatory, antirheumatic, antiarthritic and cytostatic
CC activities. (I) can be used for delivering a bioactive macromolecule to
CC a mucosal surface. It is used for the oral delivery of a drug to an
CC animal encompassing a human as well as other mammals, reptiles, fish,
CC amphibians and birds. It is used to deliver drugs including peptides,
CC proteins, monoclonal antibodies their fragments, nucleic acids (DNA and
CC RNA), oligonucleotides, antisense oligonucleotides, and small molecules.
CC It can be used to examine the function of various proteins and genes in
CC an animal, including those that are essential to animal development. It
CC can be used for the treatment of animals that are known or suspected to
CC suffer from any disease treatable with the inventive composition, e.g.
CC ulcerative colitis, rheumatoid arthritis, Crohn's disease, inflammatory
CC bowel disease, or undue cellular proliferation (cancers and tumours). The
CC present sequence represents an exemplary oligonucleotide from the present
CC invention, which can be used to inhibit HCMV

XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATCAAGAAGATCAAAACG 149

Db 21 CGCAAGAGAGAGCAAAACG 2

RESULT 355

ABX10710

ID ABX10710 standard; DNA; 21 BP.

XX ABX10710;

XX 15-APR-2003 (first entry)

DE Human glycoprotein hormone Zl11 PCR primer #6.

XX Human; ss; PCR; Zl11; glycoprotein hormone; hyperthyroidism;
KW antithyroid; chromosome 14q23.3; primer.

XX Homo sapiens.

XX US2002160953-A1.

XX 31-OCT-2002.

XX 30-AUG-2001; 2001US-00943388.

XX 25-APR-2000; 2000US-0199498P.

XX 20-APR-2001; 2001US-00839706.

XX (HOLL/) HOLLOWAY J L.

XX (WEBS/) WEBSTER P J.

XX (THAY/) THAYER E C.

XX Holloway JL, Webster PJ, Thayer EC;

XX WPI; 2003-209228/20.

XX New Zl11 polypeptides and polynucleotides, useful for manufacturing a
PT medicament for treating hyperthyroidism.

XX Example 4; Page 45; 51pp; English.

XX The invention relates to an isolated glycoprotein hormone Zl11 sequence,
CC the mature protein or antigenic peptides derived from Zl11. Also
CC included are an isolated polynucleotide encoding Zl11, an isolated
CC antibody that specifically binds to Zl11, treating hyperthyroidism in
CC female mammals by administering Zl11 and a pharmaceutical composition
CC comprising Zl11. Zl11 is useful for manufacturing a medicament for
CC treating hyperthyroidism. Anti-Zl11 antibodies can be used to detect
CC Zl11 in tissue sections from a biopsy specimen or to screen biological
CC samples in vitro for the presence of Zl11. Zl11 is useful for treating
CC women with hyperthyroidism. The nucleic acid molecules are useful for
CC detecting the expression of a Zl11 gene in a biological sample. The
CC present sequence is a human PCR primer used to isolate mouse Zl11 DNA to
CC use as a probe for detecting Zl11 genomic DNA

XX Sequence 21 BP; 3 A; 6 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 163 ACATCCGAGGTGCGCAGG 182

Db 2 ACATCCGAGGTGCGCAGTGG 21

RESULT 356

ACC59014/C
 ID ACC59014 standard; DNA; 21 BP.
 XX AC
 XX ACC59014;
 XX DT
 XX 01-JUL-2003 (first entry)
 XX DE
 XX Human IE-2 antisense oligonucleotide.
 XX KW
 XX Human; antisense; transcobalamin receptor; intrinsic factor receptor;
 XX cytosolic; antiviral; anti-HIV; hepatotropic; antiinflammatory;
 XX virucide; tuberculostatic; protozoicide; cancer; viral disease; ss; IE-2.
 XX OS
 XX Homo sapiens.
 XX PN
 XX WO2003025139-A2.
 XX PD
 XX 27-MAR-2003.
 XX PF
 XX 17-SEP-2002; 2002WO-US029571.
 XX PR
 XX 17-SEP-2001; 2001US-0322821P.
 XX PR
 XX 13-SEP-2002; 2002US-0410627P.
 XX XX
 XX (MAYO-) MAYO FOUND MEDICAL EDUCATION & RES.
 XX PA
 XX Collins DA, Callstrom M, Prendergast FG;
 XX PI
 XX WPI; 2003-430085/40.
 XX DR
 XX Compound useful for treating e.g. cancer comprises optionally stabilized
 XX nucleic acid, aptamer, antisense sequence, or antisense mimic conjugated
 XX to a ligand for the transcobalamin receptor or intrinsic factor receptor.
 XX PT
 XX Disclosure; Page 88; 156pp; English.
 XX CC
 XX The invention relates to a novel compound comprising an optionally
 XX stabilised nucleic acid or its analogue encoding a peptide, protein or
 XX other biological modifier, aptamer, antisense sequence, or antisense
 XX mimic conjugated directly or through a linker to a ligand for the
 XX transcobalamin receptor or intrinsic factor receptor. A compound of the
 XX invention has cytostatic, antiviral, anti-HIV, hepatotropic,
 XX antiinflammatory, virucide, tuberculostatic, and protozoicide activity.
 XX The compounds may be useful in the manufacture of a medicament for the
 XX delivery of material that affects gene translation or gene transcription
 XX and modulates a biological process, in medical therapy. A compound is
 XX also useful for treating cancer, viral diseases such as infection caused
 XX by HIV, hepatitis (hepatitis B, hepatitis C and hepatitis D), herpes, TB,
 XX Epstein-Barr virus, malaria, influenza virus, Para influenza virus, mumps
 XX virus, adenoviruses, reoviruses, respiratory syncytial virus,
 XX rhinoviruses, polioviruses, coxsackie-viruses, echoviruses,
 XX enteroviruses, gastroenteritis viruses, rubella viruses, human
 XX molluscum contagiosum virus, human parvovirus B19, cytomegalovirus, human
 XX papillomavirus, varicella zoster, arenaviruses or filoviruses. The
 XX present sequence is used in the exemplification of the invention
 XX SQ
 XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 5e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 130 CGGATGAAGAGATCAACG 149
 Db 21 CGCAAGAGAGAGCAACG 2
 RESULT 357
 ACC59001/C
 ID ACC59001 standard; DNA; 21 BP.
 XX AC
 XX ACC59001;
 XX XX

DT
 XX
 XX 01-JUL-2003 (first entry)
 XX DE
 XX Human IE-2 antisense oligonucleotide.
 XX KW
 XX Human; antisense; transcobalamin receptor; intrinsic factor receptor;
 XX cytosolic; antiviral; anti-HIV; hepatotropic; antiinflammatory;
 XX virucide; tuberculostatic; protozoicide; cancer; viral disease; ss; IE-2.
 XX OS
 XX Homo sapiens.
 XX PN
 XX WO2003025139-A2.
 XX PD
 XX 27-MAR-2003.
 XX PF
 XX 17-SEP-2002; 2002WO-US029571.
 XX PR
 XX 17-SEP-2001; 2001US-0322821P.
 XX PR
 XX 13-SEP-2002; 2002US-0410627P.
 XX XX
 XX (MAYO-) MAYO FOUND MEDICAL EDUCATION & RES.
 XX PA
 XX Collins DA, Callstrom M, Prendergast FG;
 XX PI
 XX WPI; 2003-430085/40.
 XX DR
 XX Compound useful for treating e.g. cancer comprises optionally stabilized
 XX nucleic acid, aptamer, antisense sequence, or antisense mimic conjugated
 XX to a ligand for the transcobalamin receptor or intrinsic factor receptor.
 XX PT
 XX Disclosure; Page 87; 156pp; English.
 XX CC
 XX The invention relates to a novel compound comprising an optionally
 XX stabilised nucleic acid or its analogue encoding a peptide, protein or
 XX other biological modifier, aptamer, antisense sequence, or antisense
 XX mimic conjugated directly or through a linker to a ligand for the
 XX transcobalamin receptor or intrinsic factor receptor. A compound of the
 XX invention has cytostatic, antiviral, anti-HIV, hepatotropic,
 XX antiinflammatory, virucide, tuberculostatic, and protozoicide activity.
 XX The compounds may be useful in the manufacture of a medicament for the
 XX delivery of material that affects gene translation or gene transcription
 XX and modulates a biological process, in medical therapy. A compound is
 XX also useful for treating cancer, viral diseases such as infection caused
 XX by HIV, hepatitis (hepatitis B, hepatitis C and hepatitis D), herpes, TB,
 XX Epstein-Barr virus, malaria, influenza virus, Para influenza virus, mumps
 XX virus, adenoviruses, reoviruses, respiratory syncytial virus,
 XX rhinoviruses, polioviruses, coxsackie-viruses, echoviruses,
 XX enteroviruses, gastroenteritis viruses, rubella viruses, human
 XX molluscum contagiosum virus, human parvovirus B19, cytomegalovirus, human
 XX papillomavirus, varicella zoster, arenaviruses or filoviruses. The
 XX present sequence is used in the exemplification of the invention
 XX SQ
 XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 5e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 130 CGGATGAAGAGATCAACG 149
 Db 21 CGCAAGAGAGAGCAACG 2
 RESULT 358
 ABZ79922/C
 ID ABZ79922 standard; DNA; 21 BP.
 XX AC
 XX ABZ79922;
 XX DT
 XX 19-MAY-2003 (first entry)
 XX XX
 XX Human TGR23-2 ligand related PCR primer SEQ ID NO:34.
 XX DE
 XX Neuroprotective; vasotropic; gastrointestinal; immunological; cytostatic;

ID ACA61365 standard; RNA; 21 BP.
 XX ACA61365;
 AC
 XX
 DT 11-AUG-2003 (first entry)
 XX Antiviral screening immunoassay oligonucleotide #2.
 DE
 XX Antiviral screening, immunoassay; ss; nuclease inhibitor; gene therapy;
 KW AIDS; bacterial infection; viral infection; protozoan infection;
 KW abnormal cell proliferation; tumour formation; atherosclerosis.
 XX
 XX Unidentified.
 OS Synthetic.
 XX
 XX
 PH Key Location/Qualifiers
 modified_base 1..7
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER = 2'-O-methyl nucleotides"
 FT modified_base 15..21
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "OTHER = 2'-O-methyl nucleotides"
 XX
 PN US2003004325-A1.
 XX
 XX 02-JAN-2003.
 PD
 XX 28-NOV-2001; 2001US-00996263.
 PF
 XX 11-JAN-1990; 90US-00463358.
 PR 13-AUG-1990; 90US-00566977.
 PR 11-JAN-1991; 91WO-US000243.
 PR 12-AUG-1991; 91WO-US005720.
 PR 24-DEC-1991; 91US-00814961.
 PR 05-MAR-1992; 92US-00835932.
 PR 01-JUN-1992; 92US-00854634.
 PR 23-DEC-1992; 92WO-US011339.
 PR 21-JUN-1994; 94US-00244993.
 PR 06-JUN-1995; 95US-00471973.
 PR 17-AUG-1998; 98US-00135202.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 XX Cook PD, Kawasaki AM;
 PI
 XX WPI; 2003-438873/41.
 DR
 XX New nuclease resistant compounds, useful as therapeutics, diagnostic
 PT agents, or research reagents, or for treating an organism with a disease
 PT associated with the undesired production of a protein, e.g. bacterial
 PT infections or AIDS.
 XX
 PS Example 34; Page 31; 50pp; English.
 XX
 XX The invention relates to a nuclease resistant compound that hybridises
 CC with RNA or DNA, comprising covalently-bound nucleosides that
 CC individually include a ribose of deoxyribose sugar portion and a base
 CC portion. The nuclease resistant compounds are useful as therapeutics,
 CC diagnostic agents, or research reagents. The compounds are also useful
 CC for modulating the activity of an RNA or DNA molecule, or for treating an
 CC organism with a disease associated with the undesired production of a
 CC protein, e.g. bacterial, viral or protozoan infections, AIDS, abnormal
 CC cell proliferation and tumour formation, or atherosclerosis. The present
 CC sequence represents the antiviral screening immunoassay oligonucleotide
 CC #2
 XX
 XX Sequence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other;
 PS
 XX Query Match 0.9%; Score 15.2; DB 1; Length 21;
 XX Best Local Similarity 85.0%; Pred. NO. 5e+02;
 XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAGAGATCAACG 149
 DB 21 CGCAGAGAGAGCAACG 2
 RESULT 361
 ADC24666/C
 ID ADC24666 standard; DNA; 21 BP.
 XX
 AC ADC24666;
 XX
 DT 18-DEC-2003 (first entry)
 XX
 DE Antisense DNA #14 that can be conjugated to the carriers of invention.
 XX cobalamin-bound detectable; radioimaging; infectious disease;
 KW cardiovascular disorder; antibiotic; antiviral agent; ss.
 XX
 OS Synthetic.
 XX WO2003026674-A1.
 PN
 PD 03-APR-2003.
 XX
 PF 30-SEP-2002; 2002WO-US031038.
 XX
 PR 28-SEP-2001; 2001US-0326183P.
 XX
 PA (MAYO-) MAYO FOUND MEDICAL EDUCATION & RES.
 XX
 PI Collins DA;
 XX
 DR WPI; 2003-393314/37.
 XX
 PT Composition useful for the treatment of e.g. infectious disease,
 PT comprises a cobalamin-bound detectable or therapeutic agent in
 PT combination with a cobalamin transport protein.
 XX
 PS Example 4; SEQ ID NO 14; 97pp; English.
 XX
 XX The present invention relates to a cobalamin-bound detectable or
 CC therapeutic agent in combination with a cobalamin transport protein. In
 CC the manufacture of a medicament to increase the uptake of detectable
 CC agent useful in radioimaging or therapeutic agent for treatment of a
 CC disorder associated with abnormal cellular proliferation, an infectious
 CC disease and cardiovascular disorder; as an antibiotic or antiviral agent;
 CC for transcription of a factor. The method increases efficiency of
 CC vitamin B12 or vitamin B12 conjugated materials. The presents sequence
 CC represents an antisense nucleotide that can be conjugated to the carriers
 CC described in the present invention.
 XX
 SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. NO. 5e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 130 CGGATGAGAGATCAACG 149
 DB 21 CGCAGAGAGAGCAACG 2
 RESULT 362
 ADC24653/C
 ID ADC24653 standard; DNA; 21 BP.
 XX
 AC ADC24653;
 XX
 DT 18-DEC-2003 (first entry)
 XX
 DE Antisense DNA #1 that can be conjugated to the carriers of invention.
 XX


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XX AC AAQ43226;
XX DT 25-MAR-2003. (revised)
XX DT 13-OCT-1993 (first entry)
XX DE B-B10 V region primer VHBacK #1.
XX KW Complementarity-determining region; CDR; humanised; antibody; hIL2R;
XX KW human; interleukin; IL-2; receptor; murine; anti-human; Ab; T-cell;
XX KW monoclonal antibody; B-B10; mixed lymphocyte reaction; variable; V;
XX KW region; PCR; framework; plasmid; heavy; H; light; L; amplify; primer;
XX KW polymerase chain reaction; ss.
XX OS Synthetic.
XX PN W09311238-A1.
XX PD 10-JUN-1993.
XX PF 03-DEC-1992; 92WO-JP001583.
XX PR 06-DEC-1991; 91JP-00323319.
XX PA (SUMI) SUMITOMO PHARM CO LTD.
XX PA (BIOT) BIOTEST PHARMA GMBH.
XX PA (INNO-) INNOTHERAPIE LAB.
XX PI Nakatani T, Gomi H, Wijdenes J, Noguchi H;
XX WPI; 1993-197057/24.
XX DT Humanised antibody comprising - CDR region of mouse MAB B-B10 specific
XX PT for IL-2 receptor useful for treating carcinoma expressing IL-2 receptor.
XX PS Disclosure; Page 44; 62pp; English.
XX CC The sequences given in AAQ43226-32 are primers which were used in the
XX CC cloning of DNA encoding the variable (V) regions of the murine anti-
XX CC human IL-2 receptor monoclonal Ab (MAB) B-B10. This MAB was used in the
XX CC construction of a humanised antibody (Ab) which binds specifically to
XX CC human interleukin (IL)-2 receptor (hIL2R). The complementarity-
XX CC determining regions (CDRs) for the hIL2R MAB were derived from B-B10 (see
XX CC also AAR37595-04). The hIL2R MAB is antagonistic to the binding of IL-2
XX CC to the IL-2 receptor on human T-cells. It also inhibits the human mixed
XX CC lymphocyte reaction. The CDNA encoding the variable (V) region of the B-
XX CC B10 Ab was cloned by PCR and sequenced (see also AAQ43233-36) A human Ab
XX CC with high levels of amino acid sequence homology to the murine sequence
XX CC was selected and the framework of this Ab was bound with the B-B10 V
XX CC region CDR and a part of the framework to design several kinds of the
XX CC humanised B-B10 V region. The DNA sequence coding this humanised B-B10
XX CC was synthesised and a plasmid expressing humanised B-B10 was constructed.
XX CC (Updated on 25-MAR-2003 to correct PN field.)
XX SQ Sequence 22 BP; 7 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 22;
Best Local Similarity 85.0%; Pred. No. 5.2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 140 AGATCAAAAGCGCAGCTGTCA 159
DB 1 AGGTCAAACTGCAGCAGTCA 20

RESULT 367
AAQ85817/C
ID AAQ85817 standard; DNA; 22 BP.
XX AAQ85817;
XX AAQ85817;
XX 25-MAR-2003 (revised)
DT 07-NOV-1995 (first entry)

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XX Anti-CMV 2'-O-alkylamino-containing oligomer #70.
XX Alkylamino group; ribofuranosyl sugar; antisense therapy; virus; HIV;
XX herpes; papilloma; antiviral; ss.
XX Synthetic.
XX Key Location/Qualifiers
XX misc_feature 1..22
XX /tag= b
XX /note= "contains phosphorothioate linkages between
XX nucleosides"
XX modified_base 1
XX /tag= a
XX /mod_base= OTHER
XX /note= "2'-O-[hexyl-N-(3-oxycarbonyl-cholesteryl)amino]-
XX uridine or may be 5'-O-dimethoxytrityl-2'-O-[hexyl-N-(5-
XX thiocarbonyl-3,6-dipivoyl fluorescein)amino]uridine"
XX W09506659-A1.
XX 09-MAR-1995.
XX 02-SEP-1994; 94WO-US010131.
XX 03-SEP-1993; 93US-00117363.
XX (ISIS-) ISIS PHARM INC.
XX Cook PD, Manoharan M, Guinasso CJ;
XX WPI; 1995-115397/15.
XX New amine-derivatised nucleoside(s) and oligo:nucleoside(s) - useful as
XX diagnostics, therapeutics and research reagents, partic. in anti-sense
XX therapy.
XX Example 43-44; Page 56; 117pp; English.
XX Oligomers AAQ85816-21 are generated to contain a 2'-O-alkylamino-modified
XX nucleoside containing either a cholesterol or fluorescein functional
XX group. This sequence is an analogue of an antisense sequence to a
XX cytomegalovirus (CMV) sequence. The modified nucleosides may increase the
XX half-life of the oligomers in cell extract assays for the inhibition of a
XX specific target sequences. The modified oligomer is an example of a
XX compound (see AAQ85799-Q85839 for other examples) e.g. a nucleoside or
XX oligonucleoside, which contains a ribofuranosyl sugar portion and a base
XX portion, such that at least one of the nucleoside contains at a 2'-O-, 3'-
XX -O- or 5'-O-position, a substitution (see AAQ85799 for details of the
XX substitutions). The compounds are useful in diagnostics, therapeutics and
XX as research reagents particularly in antisense therapy for killing cells
XX and viruses such as HIV, herpes or papilloma viruses. (Updated on 25-MAR-
XX 2003 to correct PN field.)
XX SQ Sequence 22 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 1 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 22;
Best Local Similarity 85.0%; Pred. No. 5.2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAGAGATCAACG 149
DB 22 CGCAAGAGAGAGCAACG 3

RESULT 368
AAQ8198/C
ID AAQ8198 standard; DNA; 22 BP.
XX AAQ8198;
XX AAQ8198;
XX 25-MAR-1998 (first entry)

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XX Oligonucleotide for murine Ig CH4 domain.
DE Sea firefly; Vargula; luciferase; label; mouse; immunoglobulin; murine;
KW constant heavy domain; epidermal growth factor receptor; fusion protein;
KW luminescent enzyme; ss.
XX Synthetic.
OS Mus sp.
XX JP09056384-A.
XX PD 04-MAR-1997.
XX PF 25-AUG-1995; 95JP-00216911.
XX PR 25-AUG-1995; 95JP-00216911.
XX PA (TORA) TORAY IND INC.
XX DR WPI; 1997-492889/46.
XX A method of labelling cells - comprising a luminescent protein fused to a
PT trans-membrane receptor.
XX Example 3; Page 3; 9pp; Japanese.
XX This oligonucleotide was used to generate a fusion protein in which the
CC sea firefly (Vargula sp.) luciferase is linked to an epidermal growth
CC factor receptor, via a mouse immunoglobulin (Ig) constant heavy domain 4
CC (CH4) chain. This oligonucleotide was used to construct the CH4 linker.
CC This is an example of a method of detectably labelling cells by fusing a
CC secretory-type luminescent enzyme with a cell membrane protein and
CC expressing the fusion protein on the cell membrane
XX Sequence 22 BP; 8 A; 6 C; 6 G; 2 T; 0 U; 0 Other;
SQ Query Match 0.9%; Score 15.2; DB 1; Length 22;
Best Local Similarity 85.0%; Pred. No. 5.2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1726 GTTACCTGCGACTGTGCC 1745
DB 20 GTTACCTGCGACTGTGCC 1
RESULT 369
AAS10876/c
ID AAS10876 standard; DNA; 22 BP.
XX AAS10876;
XX 24-OCT-2001 (first entry)
XX Human NOV2 RTQ PCR forward primer.
XX Human; NOV2; ss; fertility disorder; spermatogenesis; cardiac;
KW cytosolic; immunomodulatory; antiproliferative; antidiabetic;
KW cell proliferation; cancer; diabetic retinopathy; angiogenic disorder;
KW pulmonary disorder; haematopoietic disorder; immunological disorder;
KW inflammatory disorder; tumour related disorders; emphysema; cirrhosis;
KW wound healing; gene therapy; RTQ PCR primer; Real-time quantitative PCR.
XX Homo sapiens.
OS Synthetic.
XX WO200149729-A2.
XX 12-JUL-2001.
XX 05-JAN-2001; 2001WO-US000299.
XX 06-JAN-2000; 2000US-0174724P.

PR 11-JAN-2000; 2000US-0175434P.
PR 11-JAN-2000; 2000US-0175488P.
PR 12-JAN-2000; 2000US-0175696P.
PR 12-JAN-2000; 2000US-0175743P.
PR 13-JAN-2000; 2000US-0175819P.
PR 07-AUG-2000; 2000US-0223524P.
PR 04-JAN-2001; 2001US-00755665.
XX (CURA-) CURAGEN CORP.
XX Prayaga SK, Majumder K, Taillon BE, Spaderna SK, Spytek KA;
PI Macdougall J;
XX WPI; 2001-418356/44.
XX Nucleic acids encoding polypeptides, designated NOVX polypeptides, useful
PT for treating a syndrome associated with a NOVX-associated disorder, e.g.
PT cell proliferation (e.g. cancer and diabetic retinopathy), angiogenic or
PT pulmonary disorder.
XX Example 1; Page 120; 14pp; English.
XX The invention relates to nucleic acids encoding NOVX (X being an integer
CC from 1-8) polypeptides. The NOVX nucleic acids and polypeptides are
CC useful in diagnosing, treating or manufacturing a medicament for a
CC disease or disorder associated with NOVX e.g. cell proliferation (cancer
CC and diabetic retinopathy), angiogenic or pulmonary disorders, fertility
CC disorders (e.g. of spermatogenesis), haematopoietic, immunological,
CC inflammatory and tumour related disorders, emphysema, cirrhosis, wound
CC healing. NOVX nucleic acids are also useful in gene therapy. They are
CC also used for screening for a modulator of activity or of latency or
CC predisposition to a NOVX-associated disorder. They are also useful for
CC determining the presence of or predisposition to a NOVX-associated
CC disorder. The present sequence is an RTQ PCR primer (real-time
CC quantitative PCR) for amplifying nucleic acids encoding human NOV2
XX Sequence 22 BP; 6 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
SQ Query Match 0.9%; Score 15.2; DB 1; Length 22;
Best Local Similarity 85.0%; Pred. No. 5.2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1426 ATCTCCGAGAGGATGCCAT 1445
DB 22 ATCTCCGAGAGGATGCCAT 3
RESULT 370
ABS59071/c
ID ABS59071 standard; DNA; 22 BP.
XX ABS59071;
XX 05-NOV-2002 (first entry)
XX Human G-protein coupled receptor, reverse primer #73.
XX Human; G-protein coupled receptor; GPCR; cardiomyopathy; atherosclerosis;
KW diabetes; cell signal processing; metabolic pathway modulation; cancer;
KW adenocarcinoma; lymphoma; prostate cancer; uterus cancer; asthma;
KW immune response; neurodegenerative disorder; inflammatory disorder;
KW Crohn's disease; multiple sclerosis; Albright hereditary osteodystrophy;
KW primer; PCR; ss.
XX Homo sapiens.
OS WO200259313-A2.
XX 01-AUG-2002.
XX 18-DEC-2001; 2001WO-US049394.
XX 18-DEC-2000; 2000US-0256635P.

PR 21-DEC-2000; 2000US-0257876P.
PR 04-JAN-2001; 2001US-0259743P.
PR 10-JAN-2001; 2001US-0260718P.
PR 12-JAN-2001; 2001US-0261498P.
PR 24-JAN-2001; 2001US-0263689P.
PR 08-FEB-2001; 2001US-0267464P.
PR 22-FEB-2001; 2001US-0271021P.
PR 14-MAR-2001; 2001US-0275946P.
PR 23-MAR-2001; 2001US-0278150P.
PR 18-APR-2001; 2001US-0284591P.
PR 23-APR-2001; 2001US-0285718P.
PR 19-JUN-2001; 2001US-0293272P.
PR 16-AUG-2001; 2001US-0312902P.
XX
XX
XX (CURA-) CURAGEN CORP.
XX
XX Li L, Ballinger RA, Padigaru M, Kekuda R, Colman SD, Spytek KA;
XX Casnan SJ, Vernet CM, Shenoy SG, Gusev V, Malyankar UM, Edinger S;
XX Gerlach V, Smithson G, Stone DJ, Sciore P, Macdougall JR, Gunther E;
XX Feyman JA, Ellerman K, Gangolli EA, Millet I;
XX WPI; 2002-599789/64.
XX
XX New G protein coupled receptor polypeptides and polynucleotides, useful
PT in gene therapy, particularly for treating or preventing cardiomyopathy,
PT atherosclerosis, diabetes, multiple sclerosis, Crohn's disease or cancer
PT in humans.
XX
XX Claim 1; Page 450; 685pp; English.
XX
XX The invention relates to novel isolated G-protein coupled receptor (GPCR)
CC polypeptides and polynucleotides. The GPCR polypeptide, GPCR nucleic acid
CC and antibody are useful for treating, preventing or alleviating a GPCR-
CC associated disorder or a pathological state in a subject, particularly a
CC human. In particular, the disorder is cardiomyopathy, atherosclerosis,
CC diabetes, or a disorder related to cell signal processing and metabolic
CC pathway modulation. The GPCR polypeptide and nucleic acid are also useful
CC for diagnosing the presence of or predisposition to a disease associated
CC with altered levels of GPCR, particularly cancer. The GPCR nucleic acid
CC and polypeptide are especially useful in therapeutic or prophylactic
CC applications for disorders associated with aberrant GPCR expression or
CC activity. The DNA encoding the protein is useful in gene therapy for
CC treating the above conditions. Furthermore, the nucleic acids and
CC polypeptides are useful in treating adenocarcinoma, lymphoma, prostate
CC cancer, uterus cancer, immune response, neurodegenerative disorders,
CC asthma, inflammatory disorders, Crohn's disease, multiple sclerosis or
CC Abright hereditary osteodystrophy. These are also useful in developing a
CC powerful assay system for functional analysis of various human disorders,
CC as well as in diagnostic applications. ABS58747-ABS59231 represent human
CC GPCR coding sequences, primers and probes of the invention
XX
SQ Sequence 22 BP; 10 A; 3 C; 7 G; 2 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 22;
Best Local Similarity 85.0%; Pred. No. 5.2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 917 TGTTCCTGTTCCAGCTGCTC 936
Db 22 TCTTCCTGTTCCGCTGATC 3
RESULT 371
ABV99538/c
ID ABV99538 standard; DNA; 22 BP.
XX
XX ABV99538;
AC
XX
XX 27-JAN-2003 (first entry)
DT
XX Human NOV31 reverse PCR primer Ag3530.
DE
XX Human; anti-HIV; cytostatic; antidiabetic; antiasthmatic; cachexia; AIDS;
KW

KW antiinflammatory; cardiant; haemostatic; neuroprotective; anorectic;
KW nectropic; immunosuppressive; osteopathic; antiparkinsonian; cancer;
KW antifertility; cerebroprotective; gene therapy; MOVX; NOV; fertility;
KW metabolic disorder; diabetes; obesity; infectious disease; anorexia;
KW neurodegenerative disease; Alzheimer's disease; Parkinson's disease;
KW immune disorder; haematopoietic disorder; cardiovascular disorder;
KW bronchial asthma; dyslipidemia; metabolic disturbance; neurogenesis; PCR;
KW metabolic syndrome X; wasting disorder; cell differentiation; primer;
KW cell proliferation; haematopoiesis; wound healing; angiogenesis; ss.
XX Homo sapiens.
XX WO200272771-A2.
XX
XX 19-SEP-2002.
XX
XX 08-MAR-2002; 2002WO-US007288.
XX
XX 08-MAR-2001; 2001US-0274101P.
XX 08-MAR-2001; 2001US-0274194P.
XX 08-MAR-2001; 2001US-0274281P.
XX 08-MAR-2001; 2001US-0274322P.
XX 09-MAR-2001; 2001US-0274849P.
XX 12-MAR-2001; 2001US-0275235P.
XX 13-MAR-2001; 2001US-0275578P.
XX 13-MAR-2001; 2001US-0275579P.
XX 14-MAR-2001; 2001US-0276000P.
XX 16-MAR-2001; 2001US-0276776P.
XX 19-MAR-2001; 2001US-0276994P.
XX 20-MAR-2001; 2001US-0277239P.
XX 20-MAR-2001; 2001US-0277321P.
XX 20-MAR-2001; 2001US-0277327P.
XX 21-MAR-2001; 2001US-0277338P.
XX 21-MAR-2001; 2001US-0277791P.
XX 22-MAR-2001; 2001US-0277833P.
XX 23-MAR-2001; 2001US-0278152P.
XX 26-MAR-2001; 2001US-0278894P.
XX 27-MAR-2001; 2001US-0278999P.
XX 27-MAR-2001; 2001US-0279036P.
XX 28-MAR-2001; 2001US-0279344P.
XX 30-MAR-2001; 2001US-0279995P.
XX 30-MAR-2001; 2001US-0280233P.
XX 02-APR-2001; 2001US-0280802P.
XX 02-APR-2001; 2001US-0280822P.
XX 02-APR-2001; 2001US-0280900P.
XX 04-APR-2001; 2001US-0281194P.
XX 13-APR-2001; 2001US-0283675P.
XX 30-APR-2001; 2001US-0287424P.
XX 02-MAY-2001; 2001US-0288066P.
XX 03-MAY-2001; 2001US-0288342P.
XX 03-MAY-2001; 2001US-0288528P.
XX 15-MAY-2001; 2001US-0291190P.
XX 16-MAY-2001; 2001US-0291099P.
XX 30-MAY-2001; 2001US-0291240P.
XX 30-MAY-2001; 2001US-0294485P.
XX 31-MAY-2001; 2001US-0294883P.
XX 31-MAY-2001; 2001US-0294893P.
XX 18-JUN-2001; 2001US-0299027P.
XX 19-JUN-2001; 2001US-0299303P.
XX 19-JUN-2001; 2001US-0299310P.
XX 10-JUL-2001; 2001US-0304354P.
XX 31-JUL-2001; 2001US-0309198P.
XX 16-AUG-2001; 2001US-0312903P.
XX 10-SEP-2001; 2001US-0318462P.
XX 12-SEP-2001; 2001US-0318770P.
XX 27-SEP-2001; 2001US-0325430P.
XX 27-SEP-2001; 2001US-0325681P.
XX 18-OCT-2001; 2001US-0330380P.
XX 31-OCT-2001; 2001US-0335301P.
XX 14-NOV-2001; 2001US-0332172P.
XX 14-NOV-2001; 2001US-0332271P.
XX 14-NOV-2001; 2001US-0332272P.

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PR 14-NOV-2001; 2001US-0333184P.
PR 14-NOV-2001; 2001US-0333272P.
PR 21-NOV-2001; 2001US-0332094P.
PR 03-DEC-2001; 2001US-0337426P.
PR 03-DEC-2001; 2001US-0338092P.
PR 04-DEC-2001; 2001US-0337185P.
PR 03-JAN-2002; 2002US-0345705P.
PR 08-MAR-2002; 2002US-00093463.
XX
XX (CURA-) CURAGEN CORP.
XX
XX Rastelli L, Mezes PD, Smithson G, Guo X, Gerlach V, Casman SJ;
XX Boldog FL, Li L, Zerbussen BD, Tchernev VT, Gangolli EA, Vernet CM;
XX Pena CE, Burgess CE, Liu X, Spytek KA, Gorman L, Spaderna SK;
XX Voss EZ, Malyankar JM, Anderson DW, Patturajan M, Miller CE;
XX Traupier RJ, Padigaru M, Shenoy SG, Kekuda R, Gusev VI, Pochart PF;
XX Zhong M;
XX WPI; 2002-732824/79.
XX
XX New NOVX polypeptides and polynucleotides, useful for preventing,
XX diagnosing or treating NOVX-associated disorders e.g. diabetes, cancer,
XX Alzheimer's disease, dyslipidemias, obesity, immune or hematopoietic
XX disorders, and asthma.
XX
XX Example C; Page 505; 619pp; English.
XX
XX The present invention relates to new isolated proteins (NOVX) and their
XX coding sequences (ABV99327-ABV99595 and ABP70049-ABP70149), where X is
XX any number from 1 to 48. The NOVX proteins and coding sequences are
XX useful in the manufacture of a medicament for treating a syndrome
XX associated with a human disease, preferably a NOVX-associated disorder.
XX The NOVX coding sequences and proteins are useful for treating,
XX preventing or diagnosing diseases such as metabolic disorders, diabetes,
XX obesity, infectious diseases, anorexia, cancer-associated cachexia,
XX cancer, neurodegenerative diseases, Alzheimer's disease, Parkinson's
XX disease, immune disorders, hematopoietic disorders, cardiovascular
XX disorders, fertility, bronchial asthma, AIDS, dyslipidemia, metabolic
XX disturbances associated with obesity, metabolic syndrome X or wasting
XX disorders associated with chronic diseases or various cancers. The NOVX
XX coding sequences and proteins may also be used as targets for the
XX identification of small molecules that modulate or inhibit e.g.
XX neurogenesis, cell differentiation, cell proliferation, hematopoiesis,
XX wound healing and angiogenesis, in gene therapy, in generation of
XX antibodies that bind immunospecifically to NOVX substances for use in
XX therapeutic or diagnostic methods. The present sequence is a PCR primer,
XX which was used in an example from the invention
XX
XX Sequence 22 BP; 2 A; 6 C; 5 G; 9 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 22;
XX Best Local Similarity 85.0%; Pred. No. 5.2e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1531 CTACAAAGGAGGCGCCCT 1550
XX ||||| ||||| |||||
XX Db 22 CTACAAACGAGGACAGACT 3
XX
XX RESULT 372
XX ABK95214
XX ID ABK95214 standard; DNA; 22 BP.
XX
XX AC ABK95214;
XX
XX XX
XX DT 24-SEP-2002 (first entry)
XX
XX DE PCR primer containing part of c-jun and 6 repeated His-tags.
XX
XX KW C-terminal modified protein; protein interaction detection;
XX proteome analysis; protein-nucleic acid interaction; PCR; primer; ss.
XX
XX OS Synthetic.

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XX WO200246395-A1.
XX 13-JUN-2002.
XX
XX 07-DEC-2001; 2001WO-JP010731.
XX
XX 07-DEC-2000; 2000JP-00373105.
XX
XX (UYKE-) UNIV KEIO.
XX
XX Yanagawa H, Doi N, Miyamoto E, Takashima H, Oyama R;
XX WPI; 2002-500446/53.
XX
XX Production of C-terminal modified proteins with nucleotide-linker
XX containing modifying agents and translation templates, useful for
XX detecting protein interaction in functional analysis of genes e.g. in
XX genome projects.
XX
XX Example 5; Page 88; 95pp; Japanese.
XX
XX The invention relates to an agent for modifying the C-terminal of a
XX protein comprising an acceptor region with a group capable of binding to
XX a protein through a transpeptidation reaction in a protein translation
XX system, and a modifying region containing a non-radioactive modifier
XX linked to a part of the acceptor region via a nucleotide linker. The
XX modified proteins are useful for detecting protein interaction in
XX functional analysis of genes e.g. in genome projects, as well as protein-
XX nucleic acid interaction in large quantities in high-throughput screening
XX when studying biological molecules such as proteins and nucleic acids in
XX genome function or proteome analysis. The modified proteins can be
XX conveniently and quickly applied in studying protein interactions, with
XX improved efficiency. ABK95189-ABK95225 represent PCR primers used in
XX examples of the invention
XX
XX Sequence 22 BP; 0 A; 1 C; 13 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 22;
XX Best Local Similarity 85.0%; Pred. No. 5.2e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 230 GTGGTGGTGGTGGCGGCGACT 249
XX ||||| ||||| ||||| |||||
XX Db 1 GTGGTGGTGGTGGTGGTGGT 20
XX
XX RESULT 373
XX AAT58215/c
XX ID AAT58215 standard; DNA; 23 BP.
XX
XX AC AAT58215;
XX
XX XX
XX DT 20-MAY-1997 (first entry)
XX
XX DE Candida CDK1 gene primer.
XX
XX KW TYP1; CKS1; CDK1; CYB1; MOC1; CMK1; cell-cycle regulatory protein;
XX Candida; anti-mycotic; antifungal; preservative; yeast; cyclin; kinase;
XX phosphatase; ss.
XX
XX OS Synthetic.
XX
XX PN WO9639527-A1.
XX
XX PD 12-DEC-1996.
XX
XX PF 05-JUN-1996; 96WO-US008807.
XX
XX PR 05-JUN-1995; 95US-00463090.
XX
XX PA (MITO-) MITOTIX INC.
XX

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PI Cottarel G, Damagnez V, Draetta G;
 DR WPI; 1997-043149/04.
 XX
 XX Candida cell-cycle regulatory proteins - used to develop prods. for the
 PT diagnosis, treatment and prevention of fungal infections.
 PT
 XX
 PS Example 3; Page 35; 70pp; English.
 XX
 XX Six Candida genes have been isolated, which encode an apparent CDC25
 CC phosphatase (TYP1), a p135c1 homolog (CKS1), a cyclin dependent kinase
 CC (CDK1), a cyclin (CYB1), a CDK-activating kinase catalytic subunit
 CC (MOC1), and a Map kinase (CMK1) (AA064446 to AA064451). The TYP1
 CC polypeptide and nucleic acid is claimed, where TYP1 is at least 75%
 CC homologous to the amino acid sequence given in Seq 2, according to the
 CC claims of the specification. According to the disclosure, Seq 2 encodes
 CC CKS1 (AA064446) and Seq 1 encodes TYP1 (AA064447). The products may be
 CC used in reagents and assays which permit the rapid detection and
 CC evaluation of Candida yeast infections and for identifying cpds. which
 CC have antifungal properties and which may be used as anti-mycotic agents.
 CC Such agents can be used therapeutically, as well as, for example,
 CC preservatives in foodstuff, feed supplement for promoting weight gain in
 CC livestock, or in disinfectant formulations for treatment of non-living
 CC matter, e.g. for decontaminating hospital equipment and rooms
 XX
 XX Sequence 23 BP; 3 A; 5 C; 4 G; 3 T; 0 U; 8 Other;
 SQ
 Query Match 0.9%; Score 15.2; DB 1; Length 23;
 Best Local Similarity 60.9%; Pred. No. 5.4e+02;
 Matches 14; Conservative 3; Mismatches 6; Indels 0; Gaps 0;
 QY 1093 ACACTGTGTCACGCCCCCTGA 1115
 DB 23 ACNYTNTGTYMGNGCNCNGA 1
 RESULT 374
 AA094132/c
 ID AAT94132 standard; DNA; 23 BP.
 XX
 AC AAT94132;
 XX
 DT 22-MAY-1998 (first entry)
 XX
 DE Primer 9826 for haematopoietic cytokine receptor Zcytor1 cDNA.
 XX
 XX Haematopoietic cytokine receptor; Zcytor1; ligand detection;
 KW cancer diagnosis; agonist; antagonist; PCR primer; ss.
 XX
 OS Synthetic.
 OS Mus sp.
 XX
 PN WO9744455-A1.
 XX
 PD 27-NOV-1997.
 XX
 PF 19-MAY-1997; 97WO-US008502.
 XX
 PR 23-MAY-1996; 96US-00653740.
 XX
 XX (ZYMO) ZYMOGENETICS INC.
 PA
 XX Baumgartner JW, Foster DC, Grant FJ, Sprecher CA;
 PI WPI; 1998-018509/02.
 XX
 DR Haematopoietic cytokine receptor - useful for ligand detection, and
 XX pathological condition diagnosis.
 PT
 PT Example 5; Page 65; 86pp; English.
 XX
 PS The present sequence is a primer for the cDNA encoding a haematopoietic
 CC cytokine receptor Zcytor1, useful for ligand detection, and pathological

CC condition diagnosis, including cancer. Receptor agonists of the protein
 CC can be used to stimulate the proliferation and development of target
 CC cells in vitro and in vivo. The agonists can stimulate cell mediated
 CC immunity and lymphocyte proliferation, to treat infection involving
 CC immunosuppression, e.g. viral infections. They may also be used to
 CC suppress tumours, induce cytotoxicity, treat leukaemias and enhance the
 CC regeneration of the T-cell repertoire after bone marrow transplantation.
 CC Antagonists of the protein may be used to suppress the immune system,
 CC treat autoimmune diseases, including rheumatoid arthritis, multiple
 CC sclerosis and diabetes mellitis. Immune suppression caused by the
 CC antagonists can also be used to reduce rejection of tissue or organ
 CC transplants and grafts, and to treat T-cell specific leukaemias and
 CC lymphomas
 XX
 SQ Sequence 23 BP; 4 A; 5 C; 9 G; 5 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.2; DB 1; Length 23;
 Best Local Similarity 85.0%; Pred. No. 5.4e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1294 TCCACGAGGAGGTTCAAGAC 1313
 DB 23 TCCACGAGGAGGTTCAAGTC 4
 RESULT 375
 AA23767
 ID AA23767 standard; DNA; 23 BP.
 XX
 AC AA23767;
 XX
 DT 14-JAN-2000 (first entry)
 XX
 DE Cloning vector multiple cloning site 3 DNA.
 XX
 KW Antisense; DNA library; identification; multiple cloning site; MCS;
 KW inhibition; ss.
 XX
 OS Synthetic.
 XX
 PN WO9950457-A1.
 XX
 PD 07-OCT-1999.
 XX
 PF 28-MAR-1999; 99WO-US006742.
 XX
 PR 28-MAR-1998; 98US-0079792P.
 PR 06-NOV-1998; 98US-0107504P.
 XX
 PA (UTAH) UNIV UTAH RES FOUND.
 XX
 PI Ruffner DE, Pierce ML, Chen Z;
 XX
 DR WPI; 1999-610866/52.
 XX
 PT Production of antisense libraries, used for identifying antisense agents
 PT and for identifying target sites for antisense-mediated inhibition of a
 PT selected gene.
 XX
 PS Claim 3; Page 37; 63pp; English.
 XX
 CC This invention describes a novel method for generating an antisense
 CC library targeted to a selected RNA transcript. The methods can be used
 CC for identifying antisense agents and for identifying target sites for
 CC antisense-mediated inhibition of a selected gene. The use of a direct
 CC library for target site selection significantly simplifies the screening
 CC process, since only very small libraries need be prepared and assayed.
 CC AA23765-23767 represent multiple cloning site DNA regions used in the
 CC method of the invention
 XX
 SQ Sequence 23 BP; 8 A; 7 C; 5 G; 3 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.2; DB 1; Length 23;

```
Best Local Similarity 85.0%; Pred. No. 5.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 364 GAGAGTGACCAAGGCTTCAGC 383
Db ||||| ||||| ||||| ||||| |||||
4 GACAGTCACCAAGGCTTCAGC 23

RESULT 376
AAZ08273/c
ID AAZ08273 standard; DNA; 23 BP.
XX
AC AAZ08273;
XX
DT 07-FEB-2000 (first entry)
XX
DE Degenerate PCR primer-1 used for cloning of Candida CDK1 gene.
XX
KW Cell cycle regulatory protein; CDK1 gene; cyclin dependent kinase;
KW Candida; isolate; clone; degenerate primer; genomic DNA; amplify; ss.
XX
OS Synthetic.
XX
PN WO9957536-A2.
XX
PD 11-NOV-1999.
XX
PF 05-MAY-1999; 99WO-0009878.
XX
PR 05-MAY-1998; 98US-00072994.
XX
PA (MITO-) MITOTIX INC.
XX
PI Berlin V, Cortarel G, Damagnez V, Rudolph J, Sullivan D;
XX WPI; 2000-038847/03.
XX
PT New Candida cyclin activated kinase 1, useful for generating vaccines and
PT screening for its inhibitors.
XX
PS Example 3; Page 58; 109pp; English.
XX
CC The present DNA sequence is the degenerate PCR primer-1, used to clone
CC Candida cyclin dependent kinase, CDK1 gene. It is a cell cycle regulatory
CC protein isolated from the genomic DNA of Candida albicans and was
CC amplified using PCR
XX
SQ Sequence 23 BP; 3 A; 5 C; 4 G; 3 T; 0 U; 8 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 23;
Best Local Similarity 60.9%; Pred. No. 5.4e+02;
Matches 14; Conservative 3; Mismatches 6; Indels 0; Gaps 0;

QY 1093 ACACTGTGTGTCACCGCCCGCTGA 1115
Db ||||| ||||| ||||| ||||| |||||
23 ACNTYNTGTATGNGCNCNGA 1

RESULT 377
AAZ97452/c
ID AAA97452 standard; DNA; 23 BP.
XX
AC AAA97452;
XX
DT 29-JAN-2001 (first entry)
XX
DE Chicory germacrene A synthase A PCR primer, SEQ ID NO:11.
XX
KW Chicory; short germacrene A synthase clone; germacrene A synthase A;
KW sesquiterpene lactone biosynthesis; bitterness; pest resistance; insect;
KW nematode; micro-organism; flavour compound; fragrance; phytoalexin;
KW transgenic plant; PCR primer; ss.
XX
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OS Cichorium intybus.
OS Synthetic.
XX
PN WO200005338-A1.
XX
PD 21-SEP-2000.
XX
PF 10-MAR-2000; 2000WO-EP002130.
XX
PR 12-MAR-1999; 99EP-00870046.
XX
PA (ABDL-) AB-DLO RES INST AGROBIOLOGY & SOIL FERTI.
XX
PI Bouwmeester H, Kodde J, De Kraker J;
XX WPI; 2000-638203/61.
XX
PT Novel sesquiterpenoid synthase genes useful for reducing bitterness and
PT increasing resistance against insects, nematodes, microorganisms and
PT vertebrate herbivores in plants.
XX
PS Example 3; Page 33; 77pp; English.
XX
CC The invention relates to two chicory germacrene A synthases (AA23174,
CC AA23175), and to nucleic acids encoding them (AAA97448, AAA97449).
CC Germacrene A synthases plays a key role in the biosynthesis of
CC sesquiterpene lactones, catalysing the formation of a germacrene
CC biosynthetic precursor from farnesyl diphosphate (FDP). Sesquiterpene
CC lactones are bitter- flavoured plant products which provide resistance
CC against insects, nematodes, microorganisms and vertebrate herbivores, and
CC are also involved in plant-plant interactions. Nucleic acids encoding of
CC chicory germacrene A synthases A and B are useful for the production of
CC transgenic plants with modified sesquiterpenoid synthase activity.
CC Reduction of germacrene A synthase expression (e.g., via the use of
CC antisense sequences) can be used to reduce bitter flavours in crops, thus
CC increasing their commercial value. Increased germacrene A synthase
CC expression may be used to obtain increased insect, nematode or
CC microorganism resistance in plants, to obtain increased formation of
CC sesquiterpene lactones with desirable properties (e.g., medicinal
CC properties), and to obtain increased formation of germacrene A-derived
CC flavour and fragrance compounds or phytoalexins. Sequences AAA97452-
CC A97453 represent PCR primers used in an exemplification of the invention
CC to introduce restriction sites into the chicory germacrene A synthase A
CC cDNA (AAA97448) for subcloning
XX
SQ Sequence 23 BP; 4 A; 9 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 23;
Best Local Similarity 85.0%; Pred. No. 5.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 116 CGATCGCCATGATCGGATG 135
Db ||||| ||||| ||||| ||||| |||||
21 CGAGAGCCATGTTCCGATG 2

RESULT 378
AAH19543
ID AAH19543 standard; DNA; 23 BP.
XX
AC AAH19543;
XX
DT 23-JUL-2001 (first entry)
XX
DE Human Pz-epsilonRI alpha-chain gene oligonucleotide #2.
XX
KW Human; transcription activation; immunoglobulin E; IgE; IGE receptor;
KW Pz-epsilonRI; USP-1; USF-2; allergy; ss.
XX
OS Homo sapiens.
XX
PN JP2001057889-A.
XX
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PD 06-MAR-2001.
XX 23-AUG-1999; 99JP-00234854.
XX 23-AUG-1999; 99JP-00234854.
XX (ASAK) ASAHI BREWERIES LTD.
XX (TSUR/) TSURA T.
XX WPI; 2001-310666/33.
XX DNA having a transcription activating region of a gene, used for
XX developing an agent for preventing and treating allergic diseases.
XX Example 4; Page 6; 12pp; Japanese.
XX The present sequence is provided in a specification relating to a DNA
XX sequence which activates transcription of human high affinity
XX immunoglobulin (Ig)E receptor (Fc-epsilonRI) alpha-chain gene. It may be
XX used for inhibiting the activation of transcription relating to USP-1 or
XX USP-2. The DNA contains the sequence tggggagcagctgggtagaac, or cagctg.
XX The invention is useful for the development of an agent for preventing
XX and treating allergic diseases. The present sequence was annealed to its
XX complementary sequence to generate the double stranded DNA sequence of
XX the invention
SQ Sequence 23 BP; 3 A; 12 C; 3 G; 5 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 23;
Best Local Similarity 85.0%; Pred. No. 5.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Oy 918 GTTCTGTTCCAGCTGCTCC 937
Db 1 GTTCTACCCAGCTGCTCC 20
RESULT 379
ID AAF99964/c
AC AAF99964;
XX 23-JUL-2001 (first entry)
XX Human Fc-epsilonRI alpha-chain gene oligonucleotide #1.
XX Human; transcription activation; immunoglobulin E; IGE; IGE receptor;
XX Fc-epsilonRI; USF-1; USF-2; allergy; ss.
XX Homo sapiens.
XX JP2001057889-A.
XX 06-MAR-2001.
XX 23-AUG-1999; 99JP-00234854.
XX 23-AUG-1999; 99JP-00234854.
XX (ASAK) ASAHI BREWERIES LTD.
XX (TSUR/) TSURA T.
XX WPI; 2001-310666/33.
XX DNA having a transcription activating region of a gene, used for
XX developing an agent for preventing and treating allergic diseases.
XX Example 4; Page 5-6; 12pp; Japanese.
XX The present sequence is provided in a specification relating to a DNA
XX sequence which activates transcription of human high affinity
XX immunoglobulin (Ig)E receptor (Fc-epsilonRI) alpha-chain gene. It may be

CC used for inhibiting the activation of transcription relating to USP-1 or
CC USF-2. The DNA contains the sequence tggggagcagctgggtagaac, or cagctg.
CC The invention is useful for the development of an agent for preventing
CC and treating allergic diseases. The present sequence was annealed to its
CC complementary sequence to generate the double stranded DNA sequence of
CC the invention
XX Sequence 23 BP; 5 A; 3 C; 12 G; 3 T; 0 U; 0 Other;
SQ Query Match 0.9%; Score 15.2; DB 1; Length 23;
Best Local Similarity 85.0%; Pred. No. 5.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Oy 918 GTTCTGTTCCAGCTGCTCC 937
Db 23 GTTCTACCCAGCTGCTCC 4
RESULT 380
ABL43248
ID ABL43248 standard; DNA; 23 BP.
XX ABL43248;
AC ABL43248;
XX 11-APR-2002 (first entry)
XX Human chromosome 1p36-35 PCR primer SEQ ID NO:292.
XX Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
XX PCR primer; ss.
XX Homo sapiens.
XX JP2001321190-A.
XX 20-NOV-2001.
XX 12-MAR-2001; 2001JP-00069285.
XX 10-MAR-2000; 2000JP-00066716.
XX (RIKA) RIKAGAKU KENKYUSHO.
XX (GENO-) GENOTEX YG.
XX WPI; 2002-144136/19.
XX Arraying genome clones.
XX Claim 4; Page 10; 528pp; Japanese.
XX The present invention describes a method of arraying genome clones. The
XX method comprises: (a) clones of the genomic libraries contained in
XX multiwell plates numbered for discrimination are mixed in each of the
XX multiwell plates; (b) a primer designed based on the chromosome marker
XX sequence is added to the mixture to carry out an amplification reaction;
XX (c) a signal corresponding to the marker is detected from the resultant
XX amplified product to specify the discrimination Nos. of the multiwell
XX plates containing the clones having said marker sequence; (d) the order
XX of the markers is changed so that the same discrimination Nos. succeed to
XX the maximum in the specified discrimination Nos. to array the multiwell
XX plates; (e) the clones in the multiwell plates of the specified
XX discrimination Nos. are mixed respectively in each wells of longitudinal
XX and lateral directions; (f) the mixed clones are cultured and the
XX resultant cultures are amplified by using the above primer; (g) signals
XX are detected from the amplified products; (h) the clones in the multiwell
XX plates are specified from the detected result; and (i) the clones are
XX reconstituted as the positions on the chromosome and arrayed. The
XX microarray is useful for gene analysis. ABL42957 to ABL45322 represent
XX PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
XX represent PCR primers for human chromosome 21q22.1, which are
XX specifically claimed for use in the present invention
XX Sequence 23 BP; 11 A; 10 C; 1 G; 1 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 23;
Best Local Similarity 85.0%; Pred. No. 5.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1063 CCAACAAAGACATCTCCAA 1082
|||||
DB 1 CCAACCAAGACAACTCAA 20

RESULT 381
ABZ84155/c
ID ABZ84155 standard; DNA; 23 BP.
XX AC ABZ84155;
XX DT 14-MAY-2003 (first entry)
XX DE Toxicologically relevant rat PCR primer #1314.
XX KW Toxicologically relevant gene; toxicological response; PCR primer; ss.
XX OS Rattus sp.
XX OS Synthetic.
XX PN WO2003016500-A2.
XX PD 27-FEB-2003.
XX PF 16-AUG-2002; 2002WO-US026514.
XX PR 16-AUG-2001; 2001US-0313080P.
XX PA (PHAS-) PHASE-1 MOLECULAR TOXICOLOGY INC.
XX PI Neft RE, Dunn RT, Adkins K, Pickett GG, Kier LD, Schmeiser K;
XX PI Alen P;
XX WPI; 2003-268322/26.
XX PT Determining a toxicological response to an agent, useful for screening of
XX PT drugs, comprises comparing the expression profile of one or more human
XX PT toxic response genes to a reference gene expression profile indicative of
XX PT toxicity.
XX PS Claim 1; Page 334; 455pp; English.
XX CC The present invention describes a method (M1) for determining a
XX CC toxicological response to an agent, which comprises comparing the
XX CC expression profile of one or more human toxic response genes to a
XX CC reference gene expression profile indicative of toxicity, and so
XX CC determining the presence of a toxic response to the agent. Also
XX CC described: (1) an array comprising one or more polynucleotides selected
XX CC from the genes corresponding to the partial sequences given in ABZ82842
XX CC to ABZ84764, or their fragments of at least 20 nucleotides, or homologues
XX CC; and (2) determining if a gene putatively identified to be a toxic
XX CC response gene plays a role on toxic response pathways by determining the
XX CC expression profile of the gene after exposure of cells or a human subject
XX CC to a known toxic pharmaceutical or industrial agent, comprising: (a)
XX CC exposing cells to an agent or isolating cells from a human subject who
XX CC was exposed to an agent; (b) obtaining the test gene expression profile
XX CC for a putatively identified toxic response gene after exposure to a known
XX CC toxic pharmaceutical or industrial agent; and (c) comparing the test
XX CC profile to the expression profile of a gene with a similar function or
XX CC comparing the test profile to the expression profile of that gene after
XX CC exposure to other known toxic compounds. The methods are useful for
XX CC predicting and determining toxicological responses on a cellular, organ
XX CC or system level. The arrays comprising the human genes are useful for
XX CC toxicological screening of drugs, pharmaceutical compounds and chemicals
XX SQ Sequence 23 BP; 3 A; 7 C; 7 G; 6 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 23;

Best Local Similarity 85.0%; Pred. No. 5.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 845 AGTACTGTGCACAGGACCTG 864
|||||
DB 22 AGTCGGCGGACAGGACCTG 3

RESULT 382
AAD58475/c
ID AAD58475 standard; DNA; 23 BP.
XX AC AAD58475;
XX DT 20-NOV-2003 (first entry)
XX DE Antisense PCR primer used in the creation of 11betaHSD2 mice.
XX KW Mouse; transgenic; 11-beta hydroxysteroid dehydrogenase type 2; therapy;
XX KW 11betaHSD2; cardiac dysfunction; PCR; primer; ss.
XX OS Mus musculus.
XX PN WO2003068153-A2.
XX PD 21-AUG-2003.
XX PF 12-FEB-2003; 2003WO-US004054.
XX PR 13-FEB-2002; 2002US-0355812P.
XX PR 11-FEB-2003; 2003US-00361848.
XX PA (PHAA) PHARMACIA CORP.
XX PI McMahon EG, Wenning Q, Goellner J, Rudolph AE;
XX PI WPI; 2003-671623/63.
XX PT New transgenic mouse expressing an increased activity of enzyme 11-beta
XX PT hydroxysteroid dehydrogenase 2 in its heart, useful as a model system for
XX PT identifying and developing new drugs for treating cardiac dysfunction.
XX PS Example 1; Page 9; 35pp; English.

XX CC The invention relates to a transgenic mouse which expresses an increased
XX CC amount of enzyme activity of 11-beta hydroxysteroid dehydrogenase type 2
XX CC (11betaHSD2) in its heart relative to a non-transgenic isogenic mouse.
XX CC The transgenic mouse is useful as a model system for identifying and
XX CC developing new drugs for treating cardiac dysfunction. The present
XX CC sequence is a PCR primer used in the creation of 11betaHSD2 mice
XX SQ Sequence 23 BP; 7 A; 8 C; 7 G; 1 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 23;
Best Local Similarity 85.0%; Pred. No. 5.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 237 TGTGGCGGCGAGTGCACCTG 256
|||||
DB 22 TGTGGCGGCGACTGGCCCTG 3

RESULT 383
AAF50618
ID AAF50618 standard; DNA; 15 BP.
XX AC AAF50618;
XX DT 30-MAR-2001 (first entry)
XX DE IGF-I oligonucleotide #1578.
XX KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
Query Match 0.9%; Score 15.2; DB 1; Length 23;

KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.
 XX Homo sapiens.
 OS
 PN WO200078341-A1.
 XX
 PD 28-DEC-2000.
 XX
 PF 21-JUN-2000; 2000WO-AU000693.
 XX
 PD 28-DEC-2000.
 XX
 PF 21-JUN-1999; 99US-0140345P.
 XX
 PD 21-JUN-2000; 2000WO-AU000693.
 XX
 PD 21-JUN-1999; 99US-0140345P.
 XX
 PD (MURD-) MURDOCH CHILDRENS RES INST.
 XX
 PD Wright CJ, Werther GA, Edmondson SR;
 XX WPI; 2001-041421/05.
 XX
 PD Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 PT UV (ultra-violet) treatment (optional) and an antisenase nucleic acid that
 PT inhibits or reduces growth factor mediated cell proliferation and/or
 PT inflammation.
 XX
 PS Example 8; Page 71; 201pp; English.
 XX
 CC The present invention relates to a method for ameliorating the effects of
 CC skin disorders. The method comprises contacting the skin with an
 CC antisenase oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 CC inhibiting or reducing growth factor mediated cell proliferation,
 CC inflammation and/or other disorders. The present sequence is an
 CC oligonucleotide which can be used to design the antisenase
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
 CC F45161). The method is useful for ameliorating the effects of psoriasis,
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 CC hyperneovascular condition such as a neovascular condition of the retina,
 CC brain or skin, growth factor-mediated malignancies, other sclerotic
 CC disease, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia
 XX
 SQ Sequence 15 BP; 2 A; 7 C; 4 G; 2 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15; DB 1; Length 15;
 Best Local Similarity 100.0%; Pred. No. 3.8e+02;
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1101 GTACCGGCCCTGA 1115
 DB 1 GTACCGGCCCTGA 15
 RESULT 384
 AAF50617
 ID AAF50617 standard; DNA; 15 BP.
 XX
 AC AAF50617;
 XX
 DT 30-MAR-2001 (first entry)
 XX
 DE IGF-I oligonucleotide #1577.
 XX
 KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.

KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.
 XX Homo sapiens.
 OS
 PN WO200078341-A1.
 XX
 PD 28-DEC-2000.
 XX
 PF 21-JUN-2000; 2000WO-AU000693.
 XX
 PD 28-DEC-2000.
 XX
 PF 21-JUN-1999; 99US-0140345P.
 XX
 PD 21-JUN-2000; 2000WO-AU000693.
 XX
 PD 21-JUN-1999; 99US-0140345P.
 XX
 PD (MURD-) MURDOCH CHILDRENS RES INST.
 XX
 PD Wright CJ, Werther GA, Edmondson SR;
 XX WPI; 2001-041421/05.
 XX
 PD Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 PT UV (ultra-violet) treatment (optional) and an antisenase nucleic acid that
 PT inhibits or reduces growth factor mediated cell proliferation and/or
 PT inflammation.
 XX
 PS Example 8; Page 71; 201pp; English.
 XX
 CC The present invention relates to a method for ameliorating the effects of
 CC skin disorders. The method comprises contacting the skin with an
 CC antisenase oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 CC inhibiting or reducing growth factor mediated cell proliferation,
 CC inflammation and/or other disorders. The present sequence is an
 CC oligonucleotide which can be used to design the antisenase
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
 CC F45161). The method is useful for ameliorating the effects of psoriasis,
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 CC hyperneovascular condition such as a neovascular condition of the retina,
 CC brain or skin, growth factor-mediated malignancies, other sclerotic
 CC disease, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia
 XX
 SQ Sequence 15 BP; 1 A; 7 C; 5 G; 2 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15; DB 1; Length 15;
 Best Local Similarity 100.0%; Pred. No. 3.8e+02;
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1100 GGTACCGGCCCTG 1114
 DB 1 GGTACCGGCCCTG 15
 RESULT 385
 AAF50619
 ID AAF50619 standard; DNA; 15 BP.
 XX
 AC AAF50619;
 XX
 DT 30-MAR-2001 (first entry)
 XX
 DE IGF-I oligonucleotide #1579.
 XX
 KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.

PS Example 15; Col 38; 36pp; English.

CC This is a human G-alpha-12 antisense nucleotide sequence. G-alpha-12 is a
CC member of the G12/13 subfamily of G-proteins. The primary function of G-
CC alpha-12 is in cell differentiation and growth. The invention relates to
CC antisense compounds which are 8-30 nucleotides long (see AA257668-
CC 257746). The antisense molecules are targeted to the human G-alpha-12
CC nucleic acid molecule, and inhibit the expression of G-alpha-12. The
CC molecules preferably have a modified internucleotide linkage, and at
CC least one modified sugar moiety. The compounds target different regions
CC of the human G-alpha-12 RNA. The expression of human G-alpha 12 is
CC inhibited by contacting human cells or tissues in vitro with the
CC antisense molecules. The oligonucleotides are used in modulating the
CC function of nucleic acid molecules encoding G-alpha-12, ultimately
CC modulating the amount of G-alpha-12 produced. The antisense compounds can
CC be utilized for diagnostics, therapeutics, prophylaxis and as research
CC agents and kits. They may be useful in the treatment of cancer, and
CC metastatic growth

XX SQ Sequence 18 BP; 4 A; 4 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 0.9%; Score 15; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 4.6e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1633 AGCAGGCGGCGCTG 1647
DB 1 AGCAGGCGGCGCTG 15

RESULT 388
AA82618
ID AA82618 standard; DNA; 19 BP.

XX AC AA82618;

XX DT 04-DEC-2000 (first entry)

XX DE cdk2 ribozyme binding site #55.

XX RX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.

XX OS Mammalia.

XX PN WO200032765-A2.

XX PD 08-JUN-2000.

XX PF 06-DEC-1999; 93WO-US028772.

XX PR 04-DEC-1998; 98US-0110954P.

XX PA (IMMU-) IMMUSOL INC.

XX PI Tritz R, Welch PJ, Barber JR, Robbins JM;

XX DR WPI; 2000-412314/35.

XX PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
XX RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
XX PCNA and Cyclin B1.

XX PS Disclosure; Page 49; 109pp; English.

XX The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AA82415 to AA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment

SQ Sequence 19 BP; 2 A; 7 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.9%; Score 15; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 4.9e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 922 CTGTCCAGCGCC 936
DB 5 CTGTCCAGCGCTC 19

RESULT 389
AAH57780

ID AAH57780 standard; DNA; 19 BP.

XX AC AAH57780;

XX DT 10-SEP-2001 (first entry)

XX DE Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:204.

XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX recognition site; target; ribozyme binding site; eye disease; vulvurary;
XX proliferative disease; skin disease; psoriasis; diabetic retinopathy;
XX cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
XX matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
XX antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
XX antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
XX atopic dermatitis; actinic keratosis; squamous cell carcinoma;
XX basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
XX sickle cell retinopathy; ss.

XX OS Homo sapiens.
XX Synthetic.

XX PN WO200130362-A2.

XX PD 03-MAY-2001.

XX PF 26-OCT-2000; 2000WO-US029500.

XX PR 26-OCT-1999; 99US-0161532P.

XX PA (IMMU-) IMMUSOL INC.

XX PI Robbins JM, Tritz R;

XX DR WPI; 2001-300427/31.

XX Treating proliferative skin or eye diseases and scarring, using ribozymes
XX that cleave RNA encoding cytokines involved in inflammation, matrix
XX metalloproteinases, growth factors and cell-cycle dependent kinases.

XX Example 1; Page 86; 408pp; English.

XX The present invention describes a method for treating a proliferative
XX skin or eye disease and scarring. The method involves administering a
XX ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX dependent kinase, growth factor or a reductase, or administering a
XX nucleic acid molecule (II) comprising a promoter operably linked to a
XX nucleic acid segment encoding (I). (I) can have antipsoriatic,
XX dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
XX ophthalmological, vulvurary, keratolytic and virucide activities, and
XX cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX in gene therapy. (I) and (II) are useful for treating proliferative skin
XX diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX also be used for treating proliferative eye diseases such as diabetic
XX retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
XX prematurity and retinal detachment, and for treating and preventing
XX scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
XX scar. AAH57577 to AAH62099 represent sequences used in the

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CC exemplification of the present invention
XX Sequence 19 BP; 2 A; 7 C; 3 G; 7 T; 0 U; 0 Other;
SQ

Query Match      0.9%; Score 15; DB 1; Length 19;
Best Local Similarity 100.0%; Pred.No. 4.9e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 922 CTGTTCCAGCTGCTC 936
Db 5 CTGTTCCAGCTGCTC 19

RESULT 390
AAQ15415
ID AAQ15415 standard; DNA; 20 BP.
XX AC
AC AAQ15415;
XX
XX 25-MAR-2003 (revised)
DT 19-MAR-1992 (first entry)
XX
DE Probe to mutant sequence #5 of exon 3 of human c-Ha-ras gene.
XX polymerase chain reaction; PCR; nested primer; mutation; screening;
KW ras oncogene; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FT misc_feature 10..13
FT /*tag= a
FT /note= "mutant TaqI site"
XX
XX EP461496-A.
XX
XX 18-DEC-1991.
XX
XX 01-JUN-1991; 91EP-00108976.
XX
XX 08-JUN-1990; 90EP-00110907.
XX
XX (BEHW ) BEHRINGERWERKE AG.
XX
XX Carutti PA, Felleybosch E, Sandy M, Amstad P, Zijlstra J;
PI Pourzand C;
XX
XX WPI; 1991-370527/51.
XX
XX Quantitative determination of DNA sequences - contg. mutationally
PT eliminated restriction site(s), chain reaction using polymerase
PT amplification and elimination of wild-type sequences.
XX
XX Example 2; Page 9; 16pp; English.
XX
XX This is one of 12 probes which differ only in the sequence at the TaqI
CC site in the wild-type c-Ha-ras corresponding to nucleotides 2508-2511.
CC The "mutant" probes are used to detect the 12 possible base-pair
CC mutations potentially induced by treatment of cells with the carcinogen
CC ethylnitrosurea. (Updated on 25-MAR-2003 to correct P1 field.)
XX
XX Sequence 20 BP; 4 A; 10 C; 3 G; 3 T; 0 U; 0 Other;
SQ

Query Match      0.9%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred.No. 5.1e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 970 CTACACCGAGACCTC 984
Db 5 CTACACCGAGACCTC 19

RESULT 391
AAAT39013
ID AAT39013 standard; DNA; 20 BP.
XX AC
AC AAT39013;
XX
XX 29-MAY-1997 (first entry)
DT
XX Interleukin IL-8 hybridisation probe.
XX
XX Cytokine; expression profile; genital wart; interleukin 12; IL-12;
KW tumour regression; adjuvant; polymerase chain reaction; PCR;
KW condyloma acuminata; human papilloma virus; HPV-6; HPV-11; HPV16; HPV18;
KW anogenital; cutaneous; laryngeal; oesophageal; cancer; ss.
XX
XX Synthetic.
XX
XX WO9629091-A1.
XX
XX 26-SEP-1996.
XX
XX 22-MAR-1996; 96WO-GB000686.
XX
XX 22-MAR-1995; 95GB-00005784.
XX
XX (UYCA-) UNIV CAMBRIDGE TECH SERVICES LTD.
XX
XX Stanley MA, Scarpini CG;
XX
XX WPI; 1996-442947/44.
XX
XX Use of interleukin-12 to treat papilloma virus-associated lesions - esp.
PT as a vaccine adjuvant with papilloma virus antigen for immuno:therapy of
PT warts or tumours.
XX
XX Disclosure; Page 16; 32pp; English.
XX
XX RNA was extracted from genital lesions, reverse transcribed to produce
CC cDNA and then the cDNA was used as the template for PCR amplification of
CC various cytokines using the primers in AAT39013. To confirm the
CC identity of amplified cDNA, digoxigenin- labelled probes specific for
CC each cytokine (see AAT39013) were hybridised with Southern blots
CC of amplified sequences. The expression profile for regressing and non-
CC regressing warts was established and compared to cytokine expression
CC patterns in normal cervical tissue. Results showed that interleukin 12 is
CC barely expressed (if at all) in non-regressing warts, but is expressed in
CC regressing warts. This suggests a central role for IL-12 in wart
CC regression. It has been found that IL-12 can be used (especially as a
CC vaccine adjuvant) for treating papilloma virus-associated lesions such as
CC condyloma acuminata (anogenital warts) caused by human papilloma virus
CC type 6 (HPV-6) and/or HPV-11 and more generally for treatment of tumours
CC associated with HPV16 and HPV18 infection e.g. anogenital, cutaneous,
CC laryngeal and oesophageal cancers
XX
XX Sequence 20 BP; 9 A; 5 C; 1 G; 5 T; 0 U; 0 Other;
SQ

Query Match      0.9%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred.No. 5.1e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1068 AAAGACATACCTCAA 1082
Db 2 AAAGACATACCTCAA 16

RESULT 392
ADA66485
ID ADA66485 standard; DNA; 20 BP.
XX AC
AC ADA66485;
XX
XX 20-NOV-2003 (first entry)
DT
XX Transforming growth factor-beta 3 antisense oligonucleotide, SEQ ID 44.
DE

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XX Cytostatic; antirheumatic; antiarthritic; gynecological;
KW antitumor; transforming growth factor beta-3; TGF beta-3;
KW hyperproliferative disorder; cancers; atherosclerosis;
KW rheumatoid arthritis; preeclampsia; fibrosis; phosphorothioate; ss.
XX Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /mod_base= a
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'
FT and 3' ends, which are 5 nucleotides in length. Also all
FT cytidine residues are 5-methylcytidines"
XX
PN WO2003008544-A2.
XX
XX 30-JAN-2003.
XX
XX 12-JUL-2002; 2002WO-US022423.
XX
XX 14-JUL-2001; 2001US-00906158.
XX
XX (ISIS-) ISIS PHARM INC.
XX Monia BP, Freier SM;
XX WPI; 2003-229569/22.
XX
XX Novel antisense compound which is targeted to nucleic acid encoding
PT transforming growth factor beta-3, and inhibits expression of TGF-beta 3,
PT useful for treating a condition associated with TGF-beta 3, e.g. cancer.
XX
XX Claim 3; Page 87; 154pp; English.
XX
XX The present invention relates to antisense oligonucleotides (ADA66459-
CC ADA6609), which inhibit transforming growth factor (TGF) beta-3
CC expression. The oligonucleotides are useful for inhibiting the expression
CC of TGF-beta3 in cells or tissues, and for treating an animal having a
CC disease condition associated with TGF-beta3, e.g. a hyperproliferative
CC disorder such as cancers of lung, liver, colon, oesophagus, pancreas,
CC breast, skin or haematopoietic, atherosclerosis, rheumatoid arthritis,
CC preeclampsia and fibrosis.
XX
SQ Sequence 20 BP; 5 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
Query Match 0.9%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.1e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 449 TCTCCACTGAGGACA 463
DB 2 TCTCCACTGAGGACA 16
RESULT 393
ID ADA66486 standard; DNA; 20 BP.
XX
AC ADA66486;
XX
DT 20-NOV-2003 (first entry)
XX
DE Transforming growth factor-beta 3 antisense oligonucleotide, SEQ ID 45.
XX
KW Cytostatic; antirheumatic; antiarthritic; gynecological;
KW antitumor; transforming growth factor beta-3; TGF beta-3;
KW hyperproliferative disorder; cancers; atherosclerosis;
KW rheumatoid arthritis; preeclampsia; fibrosis; phosphorothioate; ss.
XX
XX Synthetic.

XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /mod_base= a
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'
FT and 3' ends, which are 5 nucleotides in length. Also all
FT cytidine residues are 5-methylcytidines"
XX
PN WO2003008544-A2.
XX
XX 30-JAN-2003.
XX
XX 12-JUL-2002; 2002WO-US022423.
XX
XX 14-JUL-2001; 2001US-00906158.
XX
XX (ISIS-) ISIS PHARM INC.
XX Monia BP, Freier SM;
XX WPI; 2003-229569/22.
XX
XX Novel antisense compound which is targeted to nucleic acid encoding
PT transforming growth factor beta-3, and inhibits expression of TGF-beta 3,
PT useful for treating a condition associated with TGF-beta 3, e.g. cancer.
XX
XX Claim 3; Page 87; 154pp; English.
XX
XX The present invention relates to antisense oligonucleotides (ADA66459-
CC ADA6609), which inhibit transforming growth factor (TGF) beta-3
CC expression. The oligonucleotides are useful for inhibiting the expression
CC of TGF-beta3 in cells or tissues, and for treating an animal having a
CC disease condition associated with TGF-beta3, e.g. a hyperproliferative
CC disorder such as cancers of lung, liver, colon, oesophagus, pancreas,
CC breast, skin or haematopoietic, atherosclerosis, rheumatoid arthritis,
CC preeclampsia and fibrosis.
XX
SQ Sequence 20 BP; 5 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
Query Match 0.9%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.1e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 449 TCTCCACTGAGGACA 463
DB 6 TCTCCACTGAGGACA 20
RESULT 394
ID AAQ37151 standard; DNA; 21 BP.
XX
AC AAQ37151;
XX
DT 25-MAR-2003 (revised)
DT 23-JUN-1993 (first entry)
XX
DE Probe to detect interleukin-8 sequences.
XX
KW IL-8; alpha; cytokine synthesis inhibitor; inflammation;
KW monokine production; Southern analysis; ss.
XX
OS Synthetic.
XX
PN WO9302693-A2.
XX
PD 18-FEB-1993.
XX
PF 06-AUG-1992; 92WO-US006378.
XX
XX 06-AUG-1991; 91US-00742129.

XX (SCHE) SCHERING CORP.
 XX De Waal Malefyt R, Howard M, Hsu DH, Ishida H, Ogarra A, Spits H;
 PI Zlotnik A;
 DR WPI; 1993-076172/09.
 XX Use of interleukin-10 to modulate inflammation or T-cell mediated immune
 PT function - for treating septic and toxic shock, auto-immune diseases,
 PT tumours and infectious diseases.
 XX Example B6; Page 85; 208pp; English.
 XX Northern and Southern hybridisations were performed to determine the
 CC level at which IL-10 and IL-4 inhibit monokine production. The probe
 CC AAQ37151 was used in Southern analysis of PCR products to detect IL-8
 CC alpha coding sequences. The sequence of the probe corresponds to
 CC nucleotides 200-221 of the sequence given in Schmid et al., (1987),
 CC J Immunol. It was found that IL-1 alpha, IL-6, TNF alpha, GM-CSF and G-
 CC CSF expression was strongly inhibited by IL-10 and IL-4 at the mRNA
 CC level. IL-1 beta and IL-8 expression was only slightly affected by IL-10.
 CC (Updated on 25-MAR-2003 to correct PN field.)
 XX
 SQ Sequence 21 BP; 9 A; 6 C; 1 G; 5 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 5.4e+02; Indels 0; Gaps 0;
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1068 AAAGACATCTCCAA 1082
 Db |||||
 2 AAAGACATCTCCAA 16
 RESULT 395
 ID AAV08002 standard; DNA; 21 BP.
 XX
 AC AAV08002;
 DT 20-JAN-1999 (first entry)
 XX
 DE Probe IL-8 for Interleukin-10 coding sequence.
 XX Interleukin-10; IL-10; septic shock; bacterial infection; toxic shock;
 KW infectious shock; inflammation; immune response modulation; therapy;
 KW probe; ss.
 XX Synthetic.
 OS
 XX US5833976-A.
 PN
 XX 10-NOV-1998.
 PD
 XX 24-MAR-1995; 95US-00410654.
 PF
 XX 06-AUG-1991; 91US-00742129.
 PR
 XX 06-AUG-1992; 92US-00926853.
 PR
 XX 19-APR-1994; 94US-00229854.
 PR
 XX (SCHE) SCHERING CORP.
 PA
 XX Ishida H, Malefyt RDW, O'garra A, Spits H, Howard M, Zlotnik A;
 PI Hsu D;
 PI WPI; 1999-008644/01.
 DR
 XX Treating shock conditions from e.g. bacterial infections - comprises
 PT administering interleukin-10.
 PT
 XX Example 14; Col 42; 109pp; English.
 PS
 XX

CC This sequence represents a probe for a interleukin-10 (IL-10) coding
 CC sequence. The IL-10 protein can be used in the method of the invention
 CC for ameliorating a symptom of: (a) septic shock in a host suffering from
 CC a bacterial (preferably gram negative) infection; (b) toxic shock; (c)
 CC infectious shock; or (d) inflammation. The method comprises administering
 CC a biologically active IL-10 (preferably human) protein, analogue or a
 CC fragment (preferably full length); the treatment is used to modulate
 CC immune responses caused by the different shock syndromes, which are
 CC endotoxin or superantigen induced toxicity, or autoimmune related
 CC conditions. The conditions are side-effects of microbial infections,
 CC caused by release of their protein products, especially on anti-microbial
 CC treatment, which when cells are killed, they lyse, releasing proteins
 CC which induce the shock conditions. IL-10 inhibits TNF-alpha (tumour
 CC necrosis factor-alpha) and TNF-gamma synthesis, which as part of an
 CC immune response elicits the shock syndromes
 XX
 SQ Sequence 21 BP; 9 A; 6 C; 1 G; 5 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 5.4e+02;
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1068 AAAGACATCTCCAA 1082
 Db |||||
 2 AAAGACATCTCCAA 16
 RESULT 396
 ID AAQ43129 standard; DNA; 23 BP.
 XX
 AC AAQ43129;
 DT 25-MAR-2003 (revised)
 DT 23-SEP-1993 (first entry)
 XX
 DE HCV type 1 NS-4 sense primer 196.
 XX
 KW Non-coding region; Hepatitis C virus; blood donor; type 2; type 1; HCV;
 KW NS-5; phylogeny; differentiation; NS-3; core region; type 3; PCR;
 KW amplify; polymerase chain reaction; primer; NS4; ss.
 XX Synthetic.
 OS
 XX WO9310239-A2.
 PN
 XX 27-MAY-1993.
 PD
 XX 20-NOV-1992; 92WO-GB002143.
 PF
 XX 21-NOV-1991; 91GB-00024696.
 PR
 XX 24-JUN-1992; 92GB-00013362.
 PR
 XX (COMM-) COMMON SERVICES AGENCY.
 PA
 XX Simmonds P, Chan S, Yap PL;
 PI WPI; 1993-182554/22.
 DR
 XX DNA encoding antigenic peptide(s) of new types of hepatitis C virus - for
 PT diagnosing and treating HCV infection, screening blood samples and
 PT identifying different HCV types.
 XX
 PS Disclosure; Page 27; 120pp; English.
 XX
 CC The sequences given in AAQ43112-33 are primers which were used to amplify
 CC specific regions of the hepatitis C virus (HCV) genome. Analysis of
 CC regions of the HCV genome revealed the existence of three distinct groups
 CC of HCV. Analysis of the region encompassing -255 to -62 of the 5' non
 CC coding region (NCR) (see AAQ43058-75) showed a difference of 9-14% in the
 CC nucleotide sequences between the three groups. Two of the groups
 CC identified were similar to those of HCV variants termed type 1 and 2,
 CC whilst the third appeared to represent a novel type of virus. Comparison

CC of the NS3 region (see AAR37927-30) showed a high degree of sequence
 CC diversity with type 3 being phylo- genetically different to type 1 and 2.
 CC The same degree different- iation was noted in the NS-5 (see AAR37923-
 CC 26), core region (see AAR37931) and the NS4 region (see AAQ43106-111)
 CC between type 3 and type 1 sequences. (Updated on 25-MAR-2003 to correct
 CC PN field.)

XX
 SQ Sequence 23 BP; 5 A; 6 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 15; DB 1; Length 23;
 Best Local Similarity 78.3%; Pred. No. 5.9e+02;
 Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Qy 292 CGTCTGACGGGGCCCACTCAG 314
 Db 23 CATTCTGAACGGGCCCACTCTG 1

RESULT 397
 AAT41227
 ID AAT41227 standard; DNA; 23 BP.

XX AAT41227;
 AC
 XX
 DT 03-DEC-1996 (first entry)
 XX
 DE Human gene signature HUMGS01473-derived sense primer.

XX Gene signature; messenger RNA; mRNA; relative abundance; frequency;
 KW human; cloning; mapping; non-biased library; diagnosis; detection;
 KW cell typing; abnormal cell function; primer; PCR; amplification;
 KW polymerase chain reaction; ss.

XX Synthetic.

XX WO9514772-A1.

XX PD 01-JUN-1995.

XX PF 11-NOV-1994; 94WO-JP001916.

XX PR 12-NOV-1993; 93JP-00355504.

XX PA (MATS/) MATSUBARA K.
 XX PA (OKUB/) OKUBO K.

XX PI Matsubara K, Okubo K;

XX PR WPI; 1995-206931/27.

XX Single-stranded DNA for identifying gene signatures - isolated from 3'-
 PT directed human cDNA library that reflects relative abundance of corresp.
 PT mRNA in specific human tissues.

XX Example 7; Fig 8; 2245pp; Japanese.

XX Primers T41001-T41382 are derived from novel human gene signature (GS)
 CC sequences which did not match with sequences deposited in Genbank release
 CC 76. The GS sequences (T19001-T26837) were obtained from 3'-directed cDNA
 CC libraries prepared from various human tissues; synthesis of cDNA was
 CC initiated from the 3'-end of mRNA by using poly(T) as the sole primer.
 CC Each library is constructed so as to reflect accurately the relative
 CC abundance of different mRNAs in the particular tissue from which it was
 CC derived. The appearance frequency of a given GS in a cDNA library can be
 CC determined (esp. using primers and probes derived from the GS sequences)
 CC as a means of diagnosing abnormal cell function or for recognising
 CC different cell types. The primers T41227-8 amplify clone pm2231 which
 CC comprises the GS HUMGS001473 (T20473), located on chromosome 22

XX Sequence 23 BP; 5 A; 5 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15; DB 1; Length 23;
 Best Local Similarity 78.3%; Pred. No. 5.9e+02;

Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 QY 396 TGAGGTGCAGTCTCCAGTGAGAG 418
 Db 1 TGAGTGCACATTACTCTGTGAGAG 23

RESULT 398
 AAT59709/c
 ID AAT59709 standard; DNA; 23 BP.

XX AAT59709;
 AC
 XX
 DT 12-MAY-1997 (first entry)
 XX
 DE PCR primer CRYV1R.

XX Gene expression cassette; promoter; alcr regulator; insecticide;
 KW CryIA(c); CryV; crystal protein; delta-endotoxin; Bacillus thuringiensis;
 KW Lepidoptera; insect resistance; transgenic plant; crop protection;
 KW biological control; polymerase chain reaction; PCR; primer; ss.

XX Synthetic.

XX WO9706268-A2.

XX PD 20-FEB-1997.

XX PF 29-JUL-1996; 96WO-GB001846.

XX PR 08-AUG-1995; 95GB-00016241.

XX PA (ZENE) ZENECA LTD.

XX PI Jepson I, Paine JAM;

XX DR WPI; 1997-154272/14.

XX Chemically inducible expression cassette - contains inducible promoter
 PT activated by alcr regulator in presence of alcohol or ketone inducer,
 PT used for insecticide production in plants.

XX Example 6; Page 13; 52pp; English.

XX PCR primers (AAT59707-11) were designed to test tobacco (Nicotiana
 CC tabacum cv. Samsun) plants for the presence of Bacillus thuringiensis-
 CC derived CryV (see also AAT59702) and CryIa(c) (see also T597012)
 CC sequences following Agrobacterium-mediated transformation with vectors
 CC carrying novel constitutive or inducible gene expression cassettes
 CC Constitutive CryIa(c) expression was confirmed using primer pairs TMV1
 CC (AAT59705)/CRYIAR (AAT59706) and CRYIAl (AAT59707)/NOS (AAT59708),
 CC constitutive CryV expression with TMV1/CRYV1R (AAT59709) and CRYV1
 CC (AAT59710)/NOS, and inducible CryIa(c) expression with ALCR1
 CC (AAT59711)/NOS

XX SQ Sequence 23 BP; 4 A; 7 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15; DB 1; Length 23;
 Best Local Similarity 78.3%; Pred. No. 5.9e+02;
 Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 515 TGGAGAGCTGACCTCAATAGC 537
 Db 23 TUGAGCAGTGACCATCTACGC 1

RESULT 399
 AAZ60724/c
 ID AAZ60724 standard; DNA; 23 BP.

XX AAZ60724;

XX AC
 XX DT 16-MAY-2000 (first entry)

KW zygosity; homozygote; heterozygote; genetic screening; diagnosis;
 KW venous thromboembolism; PCR primer; ss.
 XX Homo sapiens.
 OS Synthetic.
 XX US6207425-B1.
 FN 27-MAR-2001.
 PD 10-SEP-1998; 98US-00150900.
 PF 11-SEP-1997; 97US-0058575P.
 PR (CITY) CITY OF HOPE.
 XX Liu Q, Sommer SS;
 FI WPI; 2001-256850/26.
 DR Conducting a bi-directional polymerase chain reaction amplification of
 XX specific alleles, involves amplifying DNA containing one or both of two
 PT alleles using an outer pair of primers and an inner pair of primers.
 XX Example; Col 13; 22pp; English.
 PS

CC The present sequence is that of human Factor V (FV) gene primer A P5 (254)
 CC -23D, used in bi-directional PCR amplification of specific alleles (Bi-
 CC PASA). Its name indicates an A primer for FV (F5), the 5' end beginning
 CC at base 254 of the FIX gene exon 10 and proceeding downstream for 23
 CC bases. It also has a 5' G8C2 tail. A mutation (G to A transition) at bp
 CC 266 in exon 10 of the FV gene (see AAF30549) is associated with venous
 CC thromboembolism. Detection of the mutation in the FV gene was used to
 CC validate Bi-PASA. In Bi-PASA, 2 outer primers (P and Q) and 2 inner
 CC primers (A and B) are used. A and B are each specific for different
 CC alleles. P is complementary to the antisense strand of both alleles in a
 CC region upstream of the sequence difference (mismatch). Q is complementary
 CC to the sense strand of both alleles in a region downstream of the
 CC mismatch. In heterozygotes, 3 segments are amplified: a segment of size
 CC AQ resulting from 1 allele, another of size PB resulting from the 2nd
 CC allele, and a combined segment of size PQ. In homozygotes, segment PQ and
 CC either segments AQ or PB amplify. Under optimal PCR conditions, the
 CC relative yield of DNA products obtained using the present primer was
 CC high, as indicated by a very strong DNA band on agarose gels. Bi-PASA
 CC provides a one-tube method for simultaneously differentiating homozygotes
 CC and heterozygotes. It can detect small deletions and insertions as well
 CC as single base changes. Bi-PASA is also used to perform population
 CC screening, haplotype analysis, patient screening and carrier testing. The
 CC method is rapid, reproducible, inexpensive, non-isotopic and amenable to
 CC automation
 XX

SQ Sequence 23 BP; 2 A; 8 C; 12 G; 1 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15; DB 1; Length 23;
 Best Local Similarity 78.3%; Pred. No. 5.9e+02;
 Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 242 CGCGGAGTGACCTGGAGAGGCC 264
 |||||
 DB 1 CGCGGCGGGGCCCTGGAGAGGCC 23

RESULT 404
 ABT06518
 ID ABT06518 standard; DNA; 23 BP.
 XX AC ABT06518;
 XX 07-NOV-2002 (first entry)
 DT Retinoic acid receptor beta promoter methylation specific primer #4.
 DE Human; methylated gene; methylation; breast cancer; marker; WT-1;
 KW

KW cell proliferative disorder; TWIST; HOXA5; NES-1; RARbeta; cyclin D2;
 KW retinoic acid receptor beta; oestrogen receptor; Wilms' tumour;
 KW 14.3.3 sigma; HIN-1; RASSF1a; tumour suppressor gene; hypermethylation;
 KW PCR; primer; ss.
 XX Unidentified.
 OS WO200259347-A2.
 FN 01-AUG-2002.
 PD 28-JAN-2002; 2002WO-US002455.
 PF 26-JAN-2001; 2001US-00771357.
 PR (UYJO) UNIV JOHNS HOPKINS SCHOOL MEDICINE.
 XX Sukumar S, Evron E, Dooley WC, Sacchi N, Davidson N, Packler MJ;
 FI WPI; 2002-599803/64.
 DR Diagnosing and/or determining a predisposition to a cellular
 XX proliferative disorder of breast tissue, in particular breast cancer, by
 PT determining the state of methylation of one or more nucleic acids
 XX isolated from the subject.
 PS

XX Disclosure; Fig 3B; 115pp; English.

XX The present invention relates to a method of diagnosing a cellular
 CC proliferative disorder of breast tissue, which involves determining the
 CC state of methylation of one or more nucleic acids isolated from the
 CC subject, where the state of methylation of the nucleic acids as compared
 CC with a state of methylation from a subject not having the cellular
 CC proliferative disorder of breast tissue is indicative of a cellular
 CC proliferative disorder of breast tissue in the subject. The nucleic acids
 CC may be TWIST, HOXA5, NES-1, retinoic acid receptor beta (RARbeta),
 CC oestrogen receptor, cyclin D2, Wilms' tumour gene (WT-1), 14.3.3 sigma,
 CC HIN-1 or RASSF1A. The method is useful for diagnosing and/or determining
 CC a predisposition to a cellular proliferative disorder, in particular
 CC breast cancer including ductal carcinoma in situ, lobular carcinoma,
 CC colloid carcinoma, tubular carcinoma, medullary carcinoma, metaplastic
 CC carcinoma, intraductal carcinoma in situ, lobular carcinoma in situ and
 CC papillary carcinoma in situ. The present sequence is a primer used in the
 CC exemplification of the invention
 XX

SQ Sequence 23 BP; 8 A; 6 C; 0 G; 9 T; 0 U; 0 Other;

Query Match 0.9%; Score 15; DB 1; Length 23;
 Best Local Similarity 78.3%; Pred. No. 5.9e+02;
 Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1681 AACTACATCTTCCCTGCTTACTC 1703
 |||||
 DB 1 AATTACATTTCCAACTTACTC 23

RESULT 405
 ABT06660
 ID ABT06660 standard; DNA; 23 BP.
 XX AC ABT06660;
 XX 07-NOV-2002 (first entry)
 DT Nucleic acid detection and discrimination related oligo SEQ ID No 3.
 DE Hybridising; quantification; detection; synthesis; amplification;
 KW oligonucleotide; ds.
 XX Unidentified.
 OS WO200257479-A2.
 FN

PD 25-JUL-2002.
XX
PF 27-DEC-2001; 2001WO-US050460.
XX
PR 27-DEC-2000; 2000US-00748146.
PR 23-OCT-2001; 2001US-0330468P.
XX
XX (INVI-) INVITROGEN CORP.
XX
XX Nazarenko I, Rashtchian A, Solus J, Pires RM, Darfler M;
PI Gebeyehu G, Astatke M;
XX WPI; 2002-627370/67.
XX
XX Composition comprising nucleic acid molecules and a oligonucleotide
PT capable of hybridizing with a portion of nucleic acid, and comprises a
PT modified nucleotide at or near the 3'-terminal nucleotide.
XX
XX Example 1; Page 115; 307pp; English.
XX
XX The invention relates to a composition comprising one or more nucleic
CC acid molecules and at least one oligonucleotide, where at least a portion
CC of the oligonucleotide is capable of hybridizing with at least a portion
CC of the nucleic acid molecule and where the oligonucleotide comprises a
CC modified nucleotide at or near the 3'-terminal nucleotide. The various
CC analogue oligonucleotides are useful for quantification or detection of
CC one or more target nucleic acid molecules in a sample during nucleic acid
CC synthesis or amplification. The analogues are also useful for determining
CC the presence or absence of one or more particular nucleotides at a
CC specific position or positions in a target nucleic acid molecule. The
CC analogue oligonucleotides can also be useful for synthesizing or
CC amplifying one or more nucleic acid molecules, by mixing one or more
CC nucleic acid templates or targets with the analogue oligonucleotides, and
CC incubating the mixture to synthesize or amplify one or more nucleic acid
CC molecules complementary to all or a portion of the templates or targets.
CC This polynucleotide sequence represents a nucleic acid detection and
CC discrimination related oligonucleotide of the invention
XX
XX Sequence 23 BP; 7 A; 6 C; 7 G; 3 T; 0 U; 0 Other;
XX
Query Match 0.9%; Score 15; DB 1; Length 23;
Best Local Similarity 78.3%; Pred. No. 5.9e+02;
Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
XX
QY 945 GGCTTACTGCGCACCGGAGAGG 967
DB 1 GGCTTACAGCCACCATGAGAGG 23
XX
RESULT 406
ID ACF05961
XX ACF05961 standard; DNA; 23 BP.
XX
AC ACF05961;
XX
XX 04-DEC-2003 (first entry)
DT
DE Beta-actin upstream PCR primer.
XX
XX Beta-actin; bone morphogenic protein; human; glaucoma; diagnosis;
KW therapy; ophthalmological; PCR; primer; ss.
XX
XX Homo sapiens.
OS
XX WO2003055443-A2.
PN
XX 10-JUL-2003.
PD
XX 31-OCT-2002; 2002WO-US035251.
PF
XX 31-OCT-2001; 2001US-0334852P.
PR
XX (ALCO-) ALCON INC.
PA

PA (UYNT-) UNIV NORTH TEXAS HEALTH SCI CENT.
XX
XX Clark AF, Wordinger RJ;
PI
XX WPI; 2003-559253/52.
DR
XX Diagnosing glaucoma in a sample comprises detecting altered expression of
PT bone morphogenic proteins in sample from a cell or bodily fluid.
PT
XX Example 1; Page 25; 55pp; English.
XX
XX The present sequence is an upstream primer for the PCR amplification of
CC the human beta-actin gene. RT-PCR was used to examine the expression of
CC bone morphogenic protein (BMP) family genes in human trabecular meshwork
CC and optic nerve head tissues. The invention provides methods for
CC diagnosing glaucoma based on altered expression of BMPs. Also provided
CC are methods for treating glaucoma and for identifying agents suitable for
CC treatment of glaucoma
XX
XX Sequence 23 BP; 8 A; 7 C; 7 G; 1 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15; DB 1; Length 23;
Best Local Similarity 78.3%; Pred. No. 5.9e+02;
Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
XX
QY 506 AGGCTACTCTGGAGAGCTGACC 528
DB 1 AGGCTAACCGGAGAGATGACC 23
XX
RESULT 407
ID ADD41388
XX ADD41388 standard; DNA; 23 BP.
XX
AC ADD41388;
XX
XX 15-JAN-2004 (first entry)
DT
XX Human DNA RT-PCR primer #11.
DE
XX Human; pulmonary fibrosis; renin-angiotensin-aldosterone;
KW caspase enzyme inhibitor; endonuclease inhibitor;
KW pulmonary epithelial cell apoptosis;
KW non-thiol angiotensin activating enzyme inhibitor;
KW non-thiol ACE inhibitor; sarcoidosis; silicosis; asbestosis;
KW pneumoconiosis; hypersensitivity pneumonitis;
KW drug-induced interstitial lung disease; ILD; vasculitides;
KW histiocytosis X; Goodpasture's syndrome; chronic eosinophilic pneumonia;
KW arrhythmia; RT-PCR; primer; ss; reverse transcriptase.
XX
XX Homo sapiens.
OS
XX US2003113330-A1.
PN
XX 19-JUN-2003.
PD
XX 06-JAN-2003; 2003US-00337169.
PF
XX 08-NOV-1999; 99US-0164052P.
PR
XX 08-NOV-2000; 2000US-00708742.
PR
XX (UHAL/) UHAL B D.
PA
XX Thal BD;
XX
XX WPI; 2003-810878/76.
DR
XX Treating pulmonary fibrosis by administering antagonist of renin-
PT angiotensin-aldosterone system e.g. non-thiol angiotensin activating
PT enzyme inhibitor, caspase enzyme or endonuclease inhibitor that inhibits
PT apoptosis.
XX
XX Example 5; SEQ ID NO 17; 32pp; English.
PS

XX The invention relates to a method for treating pulmonary fibrosis
CC involving administering to a subject at risk of or suffering from
CC pulmonary fibrosis, an amount of an antagonist of a renin-angiotensin-
CC aldosterone system e.g., a caspase enzyme inhibitor or an endonuclease
CC inhibitor that inhibits pulmonary epithelial cell apoptosis, where the
CC antagonist is a non-thiol angiotensin activating enzyme (ACE) inhibitor.
CC The method is useful for treating a subject suffering from pulmonary
CC fibrosis such as idiopathic pulmonary fibrosis, sarcoidosis, familial
CC pulmonary fibrosis, silicosis, asbestosis, coal worker's pneumoconiosis,
CC carbon pneumoconiosis, hypersensitivity pneumonitis, pulmonary fibrosis
CC caused by inhalation of inorganic dust, pulmonary fibrosis caused by an
CC infectious agent, pulmonary fibrosis caused by inhalation of noxious
CC gases, aerosols, chemical dusts, fumes or vapours, or drug-induced
CC interstitial lung disease (ILD). The method is also useful in treating a
CC subject at risk of pulmonary fibrosis and undergoing radiation therapy or
CC chemotherapy and in treating pulmonary fibrosis associated with collagen-
CC vascular disorders or vasculitides, histiocytosis X, Goodpasture's
CC syndrome, chronic eosinophilic pneumonia, idiopathic pulmonary
CC haemosiderosis or arrhythmia. This sequence represents a reverse
CC transcriptase PCR (RT-PCR) primer used in the method of the invention.
XX

SQ Sequence 23 BP; 8 A; 7 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.9%; Score 15; DB 1; Length 23;

Best Local Similarity 78.3%; Pred. No. 5.9e+02;

Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 506 AGGGCTACTCTGGAGAGCTGACC 528

Db 1 AGGCCAACCCGCGAGAGATGACC 23

RESULT 408

AAA86682

ID AAA86682 standard; DNA; 18 BP.

AC AAA86682;

DT 04-DEC-2000 (first entry)

DE Cdc 2 kinase hammerhead ribozyme recognitoins site #113.

XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.

XX Mammalia.

XX WO200032765-A2.

XX 08-JUN-2000.

XX 06-DEC-1999; 99WO-US028772.

XX 04-DEC-1998; 98US-0110954P.

XX (IMMU-) IMMUSOL INC.

XX Tritz R, Welch PJ, Barber JR, Robbins JM;

XX WPI; 2000-412314/35.

XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.

PS Example 1; Page 21; 109pp; English.

XX The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The

CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment

SQ Sequence 18 BP; 1 A; 5 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 18;

Best Local Similarity 88.9%; Pred. No. 5e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1030 GCTGACTTTGGCCTGGCC 1047

Db 1 GCTGATTTGGCCTTGC 18

RESULT 409

AAA86680

ID AAA86680 standard; DNA; 18 BP.

XX AAA86680;

XX 04-DEC-2000 (first entry)

XX Cdc 2 kinase hammerhead ribozyme recognitoins site #111.

XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.

XX Mammalia.

XX WO200032765-A2.

XX 08-JUN-2000.

XX 06-DEC-1999; 99WO-US028772.

XX 04-DEC-1998; 98US-0110954P.

XX (IMMU-) IMMUSOL INC.

XX Tritz R, Welch PJ, Barber JR, Robbins JM;

XX WPI; 2000-412314/35.

XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.

PS Example 1; Page 21; 109pp; English.

XX The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment

SQ Sequence 18 BP; 1 A; 3 C; 6 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 18;

Best Local Similarity 88.9%; Pred. No. 5e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1028 TGGCTGACTTTGGCCTGG 1045

Db 1 TGGCTGATTTGGCCTTG 18

RESULT 410

AAA86681

ID AAA86681 standard; DNA; 18 BP.

XX AAA86681;

```
XX 04-DEC-2000 (first entry)
XX Cdc 2 kinase hammerhead ribozyme recognition site #112.
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX Mammalia.
XX WO200032765-A2.
XX 08-JUN-2000.
XX 06-DEC-1999; 99WO-US028772.
XX 04-DEC-1998; 98US-0110954P.
XX (IMMU-) INMUSOL INC.
XX Tritz R, Welch PJ, Barber JR, Robbins JW;
XX WPI; 2000-412314/35.
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
XX RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
XX PCNA and Cyclin B1.
XX Example 1; Page 21; 109pp; English.
XX The present invention relates to a hairpin or hammerhead ribozyme,
XX designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
XX other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
XX Representative examples of ribozyme recognition sites are given in
XX AA82415 to AA86787. The ribozyme of the invention is useful for
XX inhibiting restenosis by introduction of the ribozyme into cells. The
XX ribozyme is resistant to endonuclease activity and hence is efficient in
XX restenosis treatment
XX Sequence 18 BP; 1 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
XX Query Match 0.8%; Score 14.8; DB 1; Length 18;
XX Best Local Similarity 88.9%; Pred. No. 5e+02; 2; Indels 0; Gaps 0;
XX Matches 16; Conservative 0; Mismatches 0;
XX QY 1029 GCCTGACTTTCGCTGGC 1046
XX 1 GCCTGATTTCGCTTGC 18
XX Db
XX RESULT 411
XX ID AA277171 standard; DNA; 18 BP.
XX AC AA277171;
XX DT 10-SEP-2001 (first entry)
XX DE Human biallelic marker downstream amplification primer SEQ ID NO:11527.
XX Human genome; biallelic marker; high density disequilibrium map;
XX genomic map; haplotype; phenotype; polymorphic base; genotyping;
XX haplotyping; hybridisation; identification; characterisation;
XX amplification; single nucleotide polymorphism; SNP; PCR primer;
XX diagnosis; ss.
XX Homo sapiens.
XX WO9954500-A2.
XX 28-OCT-1999.
XX 21-APR-1999; 99WO-IB000822.
XX
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PR 21-APR-1998; 98US-0082614P.
PR 23-NOV-1998; 98US-0109732P.
XX (GEST ) GENSET.
XX Cohen D, Blumenfeld M, Chumakov I;
XX WPI; 2000-013267/01.
XX Novel biallelic markers used to construct a high density disequilibrium
XX map of the human genome.
XX Claim 9; Page 2688; 2745pp; English.
XX AA265654 to AA269578 represent human biallelic markers from the present
XX invention, which contain a polymorphic base at position 24 of their
XX nucleotide sequences. AA269579 to AA277440 represent amplification
XX primers for the biallelic markers. The biallelic markers of the invention
XX have a variety of uses: they can be used for high density mapping of the
XX human genome, and in complex association studies and haplotyping studies
XX which are useful in determining the genetic basis for disease states.
XX Compositions and methods of the invention can also be useful for the
XX identification of the targets for the development of pharmaceutical
XX agents and diagnostic methods, as well as the characterisation of the
XX differential efficacious responses to and side effects from
XX pharmaceutical agents acting on a disease as well as other treatment.
XX N.B. the SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
XX 3367, are not actually given a sequence in the Sequence Listing from the
XX present invention
XX Sequence 18 BP; 6 A; 7 C; 1 G; 4 T; 0 U; 0 Other;
XX Query Match 0.8%; Score 14.8; DB 1; Length 18;
XX Best Local Similarity 88.9%; Pred. No. 5e+02; 2; Indels 0; Gaps 0;
XX Matches 16; Conservative 0; Mismatches 0;
XX QY 1679 CCAACTACATCTTCCCTG 1696
XX 1 CCAACTACATAATCCCTG 18
XX Db
XX RESULT 412
XX AAH61848
XX ID AAH61848 standard; DNA; 18 BP.
XX AC AAH61848;
XX DT 10-SEP-2001 (first entry)
XX DE Cdc 2 kinase hammerhead ribozyme recognition site SEQ ID NO:4272.
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX recognition site; target; ribozyme binding site; eye disease; vulnery;
XX proliferative disease; skin disease; psoriasis; diabetic retinopathy;
XX cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
XX matrix metalloproteinase; growth factor; reductase; scarring; cystostatic;
XX antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;
XX antickling; ophthalmological; keratolytic; gene therapy; viral wart;
XX atopic dermatitis; actinic keratosis; squamous cell carcinoma;
XX basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
XX sickle cell retinopathy; ss.
XX Homo sapiens.
XX Synthetic.
XX WO200130362-A2.
XX 03-MAY-2001.
XX 26-OCT-2000; 2000WO-US029500.
XX 26-OCT-1999; 99US-0161532P.
XX
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PA (IMMU-) IMMUSOL INC.
XX Robbins JM, Tritz R;
XX WPI; 2001-300427/31.
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
XX PT that cleave RNA encoding cytokines involved in inflammation, matrix
XX PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX PS Disclosure; Page 385; 408pp; English.
XX CC The present invention describes a method for treating a proliferative
XX CC skin or eye disease and scarring. The method involves administering a
XX CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX CC dependent kinase, growth factor or a reductase, or administering a
XX CC nucleic acid molecule (II) comprising a promoter operably linked to a
XX CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
XX CC ophthalmological, vulnary, keratolytic and virucide activities, and
XX CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX CC in gene therapy. (I) and (II) are useful for treating proliferative skin
XX CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX CC also be used for treating proliferative eye diseases such as diabetic
XX CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
XX CC prematurity and retinal detachment, and for treating and preventing
XX CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
XX CC scar. AAH57577 to AAH62099 represent sequences used in the
XX CC exemplification of the present invention
XX CC Sequence 18 BP; 1 A; 5 C; 5 G; 7 T; 0 U; 0 Other;
XX CC
XX CC Query Match 0.8%; Score 14.8; DB 1; Length 18;
XX CC Best Local Similarity 88.9%; Pred. No. 5e+02;
XX CC Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX CC
XX QY 1030 GCTGACTTTGGCCTGGCC 1047
XX Db ||||| ||||| ||||| |||||
XX 1 GCTGATTTTGGCCTTGGC 18
XX
XX RESULT 413
XX AAH61847
XX ID AAH61847 standard; DNA; 18 BP.
XX AC AAH61847;
XX DT 10-SEP-2001 (first entry)
XX DE Cdc 2 kinase hammerhead ribozyme recognition site SEQ ID NO:4271.
XX KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX KW recognition site; target; ribozyme binding site; eye disease; vulnary;
XX KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
XX KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
XX KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
XX KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
XX KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
XX KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
XX KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
XX KW sickle cell retinopathy; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX OS WO200130362-A2.
XX PN 03-MAY-2001.
XX PD 26-OCT-2000; 2000WO-US029500.
XX PF
XX PP
XX

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BR 26-OCT-1999; 99US-0161532P.
XX (IMMU-) IMMUSOL INC.
XX Robbins JM, Tritz R;
XX WPI; 2001-300427/31.
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
XX PT that cleave RNA encoding cytokines involved in inflammation, matrix
XX PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX PS Disclosure; Page 385; 408pp; English.
XX CC The present invention describes a method for treating a proliferative
XX CC skin or eye disease and scarring. The method involves administering a
XX CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX CC dependent kinase, growth factor or a reductase, or administering a
XX CC nucleic acid molecule (II) comprising a promoter operably linked to a
XX CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
XX CC ophthalmological, vulnary, keratolytic and virucide activities, and
XX CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX CC in gene therapy. (I) and (II) are useful for treating proliferative skin
XX CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX CC also be used for treating proliferative eye diseases such as diabetic
XX CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
XX CC prematurity and retinal detachment, and for treating and preventing
XX CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
XX CC scar. AAH57577 to AAH62099 represent sequences used in the
XX CC exemplification of the present invention
XX CC Sequence 18 BP; 1 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
XX CC
XX CC Query Match 0.8%; Score 14.8; DB 1; Length 18;
XX CC Best Local Similarity 88.9%; Pred. No. 5e+02;
XX CC Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX CC
XX QY 1029 GCCTGACTTTGGCCTGGC 1046
XX Db ||||| ||||| ||||| |||||
XX 1 GCCTGATTTTGGCCTTGC 18
XX
XX RESULT 414
XX AAH61846
XX ID AAH61846 standard; DNA; 18 BP.
XX AC AAH61846;
XX DT 10-SEP-2001 (first entry)
XX DE Cdc 2 kinase hammerhead ribozyme recognition site SEQ ID NO:4270.
XX KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX KW recognition site; target; ribozyme binding site; eye disease; vulnary;
XX KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
XX KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
XX KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
XX KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
XX KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
XX KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
XX KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
XX KW sickle cell retinopathy; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX OS WO200130362-A2.
XX PN 03-MAY-2001.
XX PD 26-OCT-2000; 2000WO-US029500.
XX PF
XX PP
XX

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PF 26-OCT-2000; 2000WO-US029500.
XX
PR 26-OCT-1999; 39US-0161532P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Robbins JW, Tritz R;
XX
DR WPI; 2001-300427/31.
XX
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
PS Disclosure; Page 385; 408pp; English.
XX
CC The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antiproliferative,
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antiskinning,
CC ophthalmological, vulvular, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 18 BP; 1 A; 3 C; 6 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 5e+02; Mismatches 0; Gaps 0;
Matches 16; Conservative 0; Indels 2; Indels 0;

QY 1028 TGGCTGACTTTGGGCTGG 1045
DB 1 TGGCTGACTTTGGGCTGG 18

RESULT 415
ACA60586/c
ID ACA60586 standard; DNA; 18 BP.
XX
AC ACA60586;
XX
DT 11-JUN-2003 (first entry)
XX
DE Antisense inhibition of human cyclin D2 related oligonucleotide #23.
XX
KW Human; cyclin D2; diagnostic; therapeutic; prophylaxis;
KW cyclin 2 inhibition; ss.
XX
OS Homo sapiens.
XX
PN US6492173-B1.
XX
PD 10-DEC-2002.
XX
PF 01-AUG-2001; 2001US-00920760.
XX
PR 01-AUG-2001; 2001US-00920760.
XX
XX (ISIS-) ISIS PHARM INC.
XX
PI Cowsett LM;

XX WPI; 2003-361492/34.
XX
XX Novel antisense compound useful for treating diseases associated with
PT Cyclin D2 expression, comprises an oligonucleotide comprising up to 50
PT nucleobases in length, which inhibits expression of Cyclin D2 in cells or
PT tissues in vitro.
XX
XX Example 15; Col 45-46; 40pp; English.
XX
XX The invention describes a compound (I) of up to 50 nucleobases in length,
CC which inhibits the expression of Cyclin D2. (I) is useful for inhibiting
CC the expression of Cyclin D2 in cells or tissues in vitro. (I) is thus
CC useful for treating disease associated with Cyclin D2 expression. (I) is
CC useful for diagnostics, therapeutics, prophylaxis and as research
CC reagents and kits. This sequence represents human cyclin D2 inhibition
CC associated oligonucleotide
XX
SQ Sequence 18 BP; 3 A; 3 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 5e+02; Mismatches 0; Gaps 0;
Matches 16; Conservative 0; Indels 2; Indels 0;

QY 992 AGAACCTGCTCATCAACG 1009
DB 18 AGAACCTGCTCATCAACG 1

RESULT 416
ADE34621/c
ID ADE34621 standard; DNA; 18 BP.
XX
AC ADE34621;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human guanylate binding protein reverse primer #SEQ ID 14.
XX
KW Gene therapy; vaccine; rheumatoid arthritis; gene modulation; PCR;
KW primer; ss.
XX
OS Homo sapiens.
XX
PN WO2003048323-A2.
XX
PD 12-JUN-2003.
XX
PF 03-DEC-2002; 2002WO-US038461.
XX
PR 03-DEC-2001; 2001US-0337429P.
XX
PA (BRIM) BRISTOL-MYERS SQUIBB CO.
PA (CARM) CARMAN J.
PA (NADL) NADLER S G.
PA (BOWE) BOWEN M.
PA (NEUB) NEUBAUER M.
PA (LUPP) LU P.
XX
PI Carman J, Nadler SG, Bowen M, Neubauer M, Lu P;
XX
DR WPI; 2003-513754/48.
XX
XX Identifying a compound that modulates the activity of rheumatoid
PT arthritis-associated gene or protein by determining whether the test
PT compound modulates the activity of the gene or protein expressed in the
PT cell contacted with the compound.
XX
PS Disclosure; Page 24; 170pp; English.
XX
XX The invention relates to an assay for identifying a compound that
CC modulates the activity of a gene or protein associated with rheumatoid
CC arthritis. The method of the invention comprises providing a cell

CC expressing a gene or protein associated with rheumatoid arthritis,
CC contacting the cell with a test compound, and determining whether the
CC test compound modulates the activity of the gene or protein. The method
CC of the invention is useful for preparing a composition for treating
CC rheumatoid arthritis. The current sequence represents a PCR primer used
CC in the isolation of rheumatoid arthritis associated genes.

XX
SQ Sequence 18 BP; 5 A; 6 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 18;

Best Local Similarity 88.9%; Pred. No. 5e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1207 TTTCGGGCTCCACGGTG 1224

Db 18 TCTCTGGGCTCCACGGTG 1

RESULT 417

AAA82999

ID AAA82999 standard; DNA; 19 BP.

XX
AC AAA82999;

DT 04-DEC-2000 (first entry)

DE cdk6 ribozyme binding site #59.

XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.

XX Mammalia.

OS WO2000032765-A2.

PN 08-JUN-2000.

PF 06-DEC-1999; 99WO-US028772.

PR 04-DEC-1998; 98US-0110954P.

XX (IMMU-) IMMUSOL INC.

PI Tritz R, Welch PJ, Barber JR, Robbins JM;

DR WPI; 2000-412314/35.

XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PCNA and Cyclin B1.

PS Disclosure; Page 55; 109pp; English.

CC The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment

XX
SQ Sequence 19 BP; 1 A; 8 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 19;

Best Local Similarity 88.9%; Pred. No. 5.3e-02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1030 GCTGACTTGGCTGGCC 1047

Db 2 GCTGACTTGGCTGGCC 19

RESULT 418

AAA82619

ID AAA82619 standard; DNA; 19 BP.

XX
AC AAA82619;

XX 04-DEC-2000 (first entry)

DE cdk2 ribozyme binding site #56.

XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.

XX Mammalia.

PN WO2000032765-A2.

PD 08-JUN-2000.

PF 06-DEC-1999; 99WO-US028772.

PR 04-DEC-1998; 98US-0110954P.

XX (IMMU-) IMMUSOL INC.

XX Tritz R, Welch PJ, Barber JR, Robbins JM;

DR WPI; 2000-412314/35.

XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PCNA and Cyclin B1.

PS Disclosure; Page 49; 109pp; English.

XX The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment

XX
SQ Sequence 19 BP; 3 A; 8 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 19;

Best Local Similarity 88.9%; Pred. No. 5.3e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 927 CCAGCTGCTCCGTCGCT 944

Db 1 CCAGCTGCTCCAGGCT 18

RESULT 419

AAA84266

ID AAA84266 standard; DNA; 19 BP.

XX
AC AAA84266;

XX 04-DEC-2000 (first entry)

XX Cyclin D1 ribozyme binding site #33.

XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.

XX Mammalia.

PN WO2000032765-A2.

PD 08-JUN-2000.

PF 06-DEC-1999; 99WO-US028772.

XX

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PR 04-DEC-1998; 98US-0110954P.
XX (IMMU-) IMMUSOL INC.
XX
XX Tritz R, Welch PJ, Barber JR, Robbins JM;
XX WPI; 2000-412314/35.
XX
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.
XX
XX Disclosure; Page 74; 109pp; English.
XX
XX The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX
XX Sequence 19 BP; 3 A; 5 C; 7 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 5.3e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 272 GTGCTGCTCTCTGGGAAC 289
Db | ||||| |||||
2 GAGCTGCTCTCTGGGAAC 19
RESULT 420
AAH58161
ID AAH58161 standard; DNA; 19 BP.
XX
XX AAH58161;
XX
XX 10-SEP-2001 (first entry)
XX
XX Cell-cycle dependent kinase cdk6 ribozyme binding site SEQ ID NO:585.
XX
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX recognition site; target; ribozyme binding site; eye disease; vulnery;
XX proliferative disease; skin disease; psoriasis; diabetic retinopathy;
XX cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
XX matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
XX antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;
XX antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
XX atopic dermatitis; actinic keratosis; squamous cell carcinoma;
XX basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
XX sickle cell retinopathy; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX WO200130362-A2.
XX
XX 03-MAY-2001.
XX
XX 26-OCT-2000; 2000WO-US029500.
XX
XX 26-OCT-1999; 99US-0161532P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Robbins JM, Tritz R;
XX WPI; 2001-300427/31.
XX
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
PT

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PT that cleave RNA encoding cytokines involved in inflammation, matrix
XX metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
XX Example 1; Page 114; 408pp; English.
XX
XX The present invention describes a method for treating a proliferative
XX skin or eye disease and scarring. The method involves administering a
XX ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX dependent kinase, growth factor or a reductase, or administering a
XX nucleic acid molecule (II) comprising a promoter operably linked to a
XX nucleic acid segment encoding (I). (I) can have antiproliferative,
XX dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
XX ophthalmological, vulnery, keratolytic and virucide activities, and
XX cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX in gene therapy. (I) and (II) are useful for treating proliferative skin
XX diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX also be used for treating proliferative eye diseases such as diabetic
XX retinopathy, vitreoretinopathy, sickle cell retinopathy, retnopathy of
XX prematurity and retinal detachment, and for treating and preventing burn
XX scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
XX scar. AAH57577 to AAH62099 represent sequences used in the
XX exemplification of the present invention
XX
XX Sequence 19 BP; 1 A; 8 C; 5 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 5.3e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1030 GGTGACTTTGGCTGGCC 1047
Db | ||||| |||||
2 GCTGACTTGGCTGGCC 19
RESULT 421
AAH59428
ID AAH59428 standard; DNA; 19 BP.
XX
XX AAH59428;
XX
XX 10-SEP-2001 (first entry)
XX
XX Cyclin D1 ribozyme binding site SEQ ID NO:1852.
XX
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX recognition site; target; ribozyme binding site; eye disease; vulnery;
XX proliferative disease; skin disease; psoriasis; diabetic retinopathy;
XX cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
XX matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
XX antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;
XX antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
XX atopic dermatitis; actinic keratosis; squamous cell carcinoma;
XX basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
XX sickle cell retinopathy; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX WO200130362-A2.
XX
XX 03-MAY-2001.
XX
XX 26-OCT-2000; 2000WO-US029500.
XX
XX 26-OCT-1999; 99US-0161532P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Robbins JM, Tritz R;
XX WPI; 2001-300427/31.
XX
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
DR

```

XX PT Treating proliferative skin or eye diseases and scarring, using ribozymes
 PT that cleave RNA encoding cytokines involved in inflammation, matrix
 PT metalloproteinases, growth factors and cell-cycle dependent kinases.
 XX PS Example 1; Page 206; 408pp; English.
 XX CC The present invention describes a method for treating a proliferative
 CC skin or eye disease and scarring. The method involves administering a
 CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
 CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
 CC dependent kinase, growth factor or a reductase, or administering a
 CC nucleic acid molecule (II) comprising a promoter operably linked to a
 CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
 CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
 CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
 CC in gene therapy. (I) and (II) are useful for treating proliferative skin
 CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
 CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
 CC also be used for treating proliferative eye diseases such as diabetic
 CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
 CC prematurity and retinal detachment, and for treating and preventing
 CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
 CC scar. AAH57577 to AAH62099 represent sequences used in the
 CC exemplification of the present invention
 XX CC Sequence 19 BP; 3 A; 5 C; 7 G; 4 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 14.8; DB 1; Length 19;
 Best Local Similarity 88.9%; Pred. No. 5.3e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 272 GTGCTGCTCCTGGGGAAC 289
 Db 2 GAGCTGCTCCTGGGGAAC 19
 RESULT 422
 AAH57781
 ID AAH57781 standard; DNA; 19 BP.
 AC AAH57781;
 XX 10-SEP-2001 (first entry)
 DT Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:205.
 DE Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
 KW recognition site; target; ribozyme binding site; eye disease; vulnery;
 KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
 KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
 KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
 KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
 KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
 KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
 KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
 KW sickle cell retinopathy; ss.
 XX OS Homo sapiens.
 OS Synthetic.
 XX WO200130362-A2.
 PN 03-MAY-2001.
 PD 26-OCT-2000; 2000WO-US029500.
 PF 26-OCT-1999; 98US-0161532P.
 PR (IMMU-) IMMUSOL INC.
 PA Robbins JM, Tritz R;
 PI

XX WPI; 2001-300427/31.
 DR Treating proliferative skin or eye diseases and scarring, using ribozymes
 XX PT that cleave RNA encoding cytokines involved in inflammation, matrix
 PT metalloproteinases, growth factors and cell-cycle dependent kinases.
 XX PS Example 1; Page 86; 408pp; English.
 XX CC The present invention describes a method for treating a proliferative
 CC skin or eye disease and scarring. The method involves administering a
 CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
 CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
 CC dependent kinase, growth factor or a reductase, or administering a
 CC nucleic acid molecule (II) comprising a promoter operably linked to a
 CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
 CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
 CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
 CC in gene therapy. (I) and (II) are useful for treating proliferative skin
 CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
 CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
 CC also be used for treating proliferative eye diseases such as diabetic
 CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
 CC prematurity and retinal detachment, and for treating and preventing
 CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
 CC scar. AAH57577 to AAH62099 represent sequences used in the
 CC exemplification of the present invention
 XX CC Sequence 19 BP; 3 A; 8 C; 5 G; 3 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 14.8; DB 1; Length 19;
 Best Local Similarity 88.9%; Pred. No. 5.3e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 927 CCAGCTGCTCCTGGGCT 944
 Db 1 CCAGCTGCTCCTGGGCT 18
 RESULT 423
 AAV12449/C
 ID AAV12449 standard; DNA; 20 BP.
 AC AAV12449;
 XX 14-MAY-1998 (first entry)
 DT Growth hormone receptor PCR primer P3.
 DE Growth hormone receptor; GHR; human; insulin like growth factor-1;
 KW partial growth hormone insensitivity syndrome; IGF-1; short stature;
 KW PCR primer; ss.
 XX Synthetic.
 OS Homo sapiens.
 XX WO9741887-A1.
 PN 13-NOV-1997.
 PD 18-APR-1997; 97WO-US006652.
 PF 03-MAY-1996; 96US-00643212.
 PR (GETH) GENENTECH INC.
 PA Attie KM, Carlsson LMS, Gesundheit N, Goddard A;
 PI WPI; 1997-558693/51.
 DR Treatment of partial growth hormone insensitivity syndrome - with growth
 XX hormone or insulin-like growth factor.
 PT

XX Disclosure; Page 7; 133pp; English.

XX The present sequence represents a PCR primer for growth hormone receptor

CC (GHR) used in an example of the present invention. The present invention

CC describes new methods for increasing the growth rate of a human patient

CC having partial growth hormone insensitivity syndrome (GHIS) or a non-

CC Growth Hormone (GH)-deficient short stature but not Laron Syndrome; the

CC patient has a height of at least -2 standard deviations (SD) below normal

CC for age and sex, has a serum level of high-affinity GH-binding protein of

CC at least 2 SD below normal, has serum levels of insulin-like growth

CC factor (IGF)-I below normal mean levels and has a mean level or maximum

CC stimulated serum level of GH that is at least normal, and growth rate is

CC increased by administering an effective amount of GH and/or IGF-I. The

CC methods are used to treat people with short stature including familial

CC short stature, constitutional delay or growth or idiopathic short

CC stature. The patient especially has a heterologous intra- or

CC extracellular GH receptor gene defect

XX

SQ Sequence 20 BP; 8 A; 1 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. No. 5.6e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1237 CACTTCATCTTCCGTATC 1254

DB 19 CACTTCATCTTCCGTATC 2

RESULT 424

AAV52681/C

ID AAV52681 standard; DNA; 20 BP.

XX

AC AAV52681;

DT 21-DEC-1998 (first entry)

XX

DE Hepatocyte nuclear factor 4 alpha gene exon 8 forward PCR primer.

XX

KW Hepatocyte nuclear factor 4 alpha; HNF-4 alpha; MODY1; human;

KW transcription factor; maturity onset diabetes of the young; TCF14;

KW diabetes; NIDDM; diagnosis; therapy; PCR; primer; ss.

XX

OS Synthetic.

OS Homo sapiens.

XX

FN WO9811254-A1.

PD 19-MAR-1998.

PF 10-SEP-1997; 97WO-US016037.

XX

PR 10-SEP-1996; 96US-0025719P.

PR 02-OCT-1996; 96US-0028056P.

PR 30-OCT-1996; 96US-0029679P.

XX

PA (ARCH-) ARCH DEV CORP.

XX

PI Bell GI, Yamagata K, Oda N, Kaisaki PJ, Furuta H, Menzel S;

PI Horikawa Y;

XX

DR WPI; 1998-271667/24.

PT Isolated nucleic acid encoding hepatocyte nuclear factor 1-alpha and 1-

PT beta - useful for detecting susceptibility for non-insulin dependent

PT diabetes, especially maturity-onset diabetes of the young.

XX

PS Example 3; Page 112; 363pp; English.

XX

CC This is a forward PCR primer designed for use with a reverse primer (see

CC AAV52682) in the PCR amplification of exon 8 and the flanking introns

CC (see AAV52656) of the human hepatocyte nuclear factor-4 alpha (HNF-4

CC alpha) gene (see AAV52687). Mutations of the HNF-4 alpha gene have been

CC identified by amplifying (see AAV52655-86) and sequencing the appropriate

CC exon. The invention concerns the identification of genes responsible for

CC non-insulin dependent diabetes mellitus (NIDDM) for use in diagnostics

CC and therapeutics. It demonstrates that the MODY1 (maturity-onset diabetes

CC of the young) locus is the HNF-4 alpha gene. Analysis of mutations in the

CC HNF-4 alpha gene can be diagnostic for diabetes

XX

SQ Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. No. 5.6e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 691 CTGTGTGCCTCAAGGAG 708

DB 18 CTGTGTGCCTCAAGGAG 1

RESULT 425

AAZ01841

ID AAZ01841 standard; DNA; 20 BP.

XX

AC AAZ01841;

XX

DT 07-OCT-1999 (first entry)

XX

DE PCR primer used to amplify an ORF of Chlamydia trachomatis.

XX

KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;

KW paratrachoma; inclusion conjunctivitis; genital disease; perihepatitis;

KW nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;

KW Bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.

XX

OS Synthetic.

OS Chlamydia trachomatis.

XX

FN WO9928475-A2.

XX

PD 10-JUN-1999.

XX

PF 27-NOV-1998; 98WO-IB001939.

XX

PR 28-NOV-1997; 97FR-00015041.

PR 17-DEC-1997; 97FR-00016034.

PR 04-NOV-1998; 98US-0107077P.

XX

PA (GEST) GENSET.

XX

PI Griffais R;

XX

DR WPI; 1999-371125/31.

XX

FT Genome sequence of Chlamydia trachomatis.

XX

PS Disclosure; Page 1476; 1755pp; English.

XX

CC PCR primers AAZ01426-206209 were used to amplify open reading frames

CC (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs

CC encode Polypeptides (see AAY36754-37949) which can be used as vaccines

CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also

CC be used to control growth of the microorganism. Chlamydia trachomatis is

CC responsible for a large number of diseases, e.g. eye diseases such as

CC conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion

CC conjunctivitis; genital diseases such as nongonococcal urethritis,

CC epididymitis, cervicitis, salpingitis, perihepatitis, Bartholinitis;

CC pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.

CC The polypeptides of the invention may be of use in treating these

CC diseases

XX

SQ Sequence 20 BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. No. 5.6e+02; Mismatches 2; Indels 0; Gaps 0;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 856 AAGGACCTGAAGCAGTAC 873
Db 3 AAGGACCTGAAGAGTTC 20

RESULT 426
AA79768/c
ID AAX79768 standard; DNA; 20 BP.
XX AC
XX AAX79768;
DT 17-AUG-1999 (first entry)
XX
DE PCR primer H11791 for mitochondrial DNA analysis.
XX
KW PCR primer; human; mitochondrial DNA; genetic diagnosis;
KW adult disease contraction; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
XX JP11113597-A.
PN
XX
PD 27-APR-1999.
XX
XX 13-OCT-1997; 97JP-00279127.
PF
XX
PR 13-OCT-1997; 97JP-00279127.
XX
XX (TANA/) TANAKA M.
PA
XX
XX WPI; 1999-320841/27.
DR
XX
XX Genetic diagnosis using human mitochondrial DNA - comprises detecting
PT base replacements.
PT
XX
PS Example 2; Page 6; 15pp; Japanese.
XX
XX This sequence represents a PCR primer that can be used in the method of
CC the invention. The method is for genetic diagnosis using human
CC mitochondrial DNA where there is at least one base replacement from among
CC the following five replacements: the 3010th base is changed from guanine
CC to adenine; the 483rd base from cytosine to thymine; the 5178th base
CC from cytosine to adenine; the 8414th base from cytosine to thymine; and
CC the 14688th base from cytosine to thymine. The method can be used for
CC diagnosing the probability of contracting adult diseases. A confirmation
CC of base replacement can give a diagnosis of the level of probability of
CC contraction of adult diseases
XX
SQ Sequence 20 BP; 5 A; 2 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 5.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 766 CTCAGGACCTCAACAC 783
Db 18 CTCAGGACCTCAACTC 1

RESULT 427
AAX23550/c
ID AAX23550 standard; DNA; 20 BP.
XX
XX AAX23550;
AC
XX
XX 18-JUN-1999 (first entry)
DT
XX
DE Deletion sequence oligonucleotide 3.
XX

KW Deletion sequence oligonucleotide; sensor array; eukaryotic pathogen;
KW probe; cellular adhesion modulator; cellular proliferation modulator;
KW human retrovirus; human immunodeficiency virus; non-human retrovirus;
KW HIV; primer; ss.
XX
OS Synthetic.
XX
PN WO9911820-A1.
XX
XX 11-MAR-1999.
PD
XX
PF 01-SEP-1998; 98WO-US018084.
XX
XX
PR 02-SEP-1997; 97US-00923771.
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Chen D, Srivatsa GS;
PI
XX
XX WPI; 1999-205198/17.
DR
XX
XX New compositions comprising sensor arrays made up of unique probe
PT oligonucleotides - useful for characterizing a sample of target deletion
PT oligonucleotides.
XX
XX Example 1; Page 90; 163pp; English.
PS
XX
XX This invention describes a novel composition comprising a number of
CC sensor arrays, where each array comprises a unique probe oligonucleotide,
CC which is the reverse complement of part of a unique target
CC oligonucleotide present in a mixture of target deletion sequence
CC oligonucleotides. The compositions form a method for characterizing a
CC sample of target deletion oligonucleotides which are labelled and
CC hybridize with the probe oligonucleotides of the sensor arrays. Such
CC oligonucleotides and their targets are represented in AAX23548-X23709.
CC
CC Oligonucleotides characterized by the method form pharmaceutical
CC compositions that are useful for modulating cellular adhesion or
CC proliferation, and being active against a eukaryotic pathogen, a human
CC retrovirus, a human immunodeficiency virus (HIV), or a non-human
CC retrovirus, including influenza virus, Epstein-Barr virus, Respiratory
CC Syncytial Virus or cytomegalovirus (CMV). The compositions enable
CC characterization of deletion sequence oligonucleotides having related,
CC but different nucleobase sequences, and quantification of different
CC species of deletion sequence ("target") oligonucleotides in a mixture.
CC Also, if the specificity of the oligonucleotide's nucleobase sequence for
CC its reverse complement is not modified, the method may be performed using
CC oligodeoxynucleotides
XX
SQ Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 5.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 132 GATGAAGAGATCAACG 149
Db 19 GAAGAAGAAGAGCAACG 2

RESULT 428
AAZ36936/c
ID AAZ36936 standard; DNA; 20 BP.
XX
XX AAZ36936;
AC
XX
XX 13-MAR-2000 (first entry)
DT
XX
XX PCR primer used to amplify the 5' cistron of the gag gene of MoMLV.
DE
XX
XX Gag gene; MLV; retrovirus particle; recombinant adenovirus; E1 region;
KW E4 region; nucleic acid transfer; animal model; gene regulation;
KW bioavailability; gene therapy; neurodegeneration; tumour;
KW autoimmune disease; infection; genetic vaccination; PCR primer; ss.
XX

XX OS Synthetic.
 XX OS Moloney murine leukemia virus.

XX PN W09960144-A1.

XX PD 25-NOV-1999.

XX XX 18-MAY-1999; 99WO-FR001184.

XX PR 18-MAY-1999; 98FR-00006258.

XX PA (RHON) RHONE-POULENC RORER SA.

XX PA (GENO-) GENOPOLEIC SARL.

XX PI Torrent C, Yeh P, Perricaudet M, Klatzmann D, Salzmann J;

XX XX WPI; 2000-072443/06.

XX XX Producing retroviral particles from recombinant, defective adenoviruses,
 XX PT useful for gene therapy or vaccination.

XX PS Example 1; Page 23; 73pp; French.

XX XX PCR primers AAZ36935-36 were used to amplify an ECORI/BrsGI fragment
 CC containing 5' cisron of the gag gene of Moloney murine leukemia virus
 CC (MoMLV). The amplified fragment was used to construct the retrovirus
 CC particles of the invention. All the genetic elements needed to construct
 CC these retroviral particles are incorporated into one or more recombinant
 CC adenoviruses that are defective for at least all or part of the E1 and E4
 CC regions. The retroviral particles formed are defective, but infectious,
 CC and transfer nucleic acid very efficiently. The amplified products are
 CC used for in vitro or ex vivo production of retroviral particles and for
 CC preparation of a product intended for production of retroviral particles
 CC in vivo. The particles produced are used to transfer nucleic acid into
 CC cells, to create animal models of disease which are useful for studying
 CC gene regulation and bioavailability. The retroviral particles are also
 CC useful for gene therapy of neurodegeneration, tumours, autoimmune
 CC disease, infection or many other disorders and for genetic vaccination

XX SQ Sequence 20 BP; 3 A; 2 C; 12 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred.No. 5.6e+02; Mismatches 2; Indels 0; Gaps 0;

XX QY 554 CCCTCAGCGCGCGCTCC 571

XX Db 18 CCCTAAGCTCGCTCC 1

RESULT 429

AAAC93176

ID AAC93176 standard; DNA; 20 BP.

XX AC AAC93176;

XX DT 15-FEB-2001 (first entry)

XX DE Human STAT3 phosphorothioate antisense oligonucleotide SEQ ID NO:27.

XX KW Human; mouse; STAT3; phosphorothioate; antisense oligonucleotide;

XX KW modulation; signal transducer and activator of transcription;

XX KW DNA-binding protein; signal transduction; inhibition; apoptosis;

XX KW inflammatory disease; cancer; antinflammatory; antirheumatic;

XX KW cytoskeletal; immunostimulatory; rheumatoid arthritis; leukaemia; myeloma;

XX KW melanoma; lymphoma; diagnosis; ss.

XX OS Homo sapiens.

XX XX W0200061602-A1.

XX PN 19-OCT-2000.

XX PF 06-APR-2000; 2000WO-US009054.

XX PR 08-APR-1999; 99US-00288461.

XX PA (ISIS-) ISIS PHARM INC.

XX XX Karras JG;

XX XX WPI; 2000-619223/59.

XX XX New antisense compound for inhibiting the expression of signal transducer
 XX PT and activator of transcription 3 (STAT3) in cells or tissues and treating
 XX PT diseases or condition associated with STAT3, such as rheumatoid arthritis
 XX PT and cancer.

XX PS Example 2; Page 46; 104pp; English.

XX XX The present invention describes an antisense compound (I), 8 to 30
 CC nucleobases in length, that is targeted to a nucleic acid molecule
 CC encoding STAT3 (Signal Transducer and Activator of Transcription) and
 CC which inhibits the expression of it. (I) has antinflammatory,
 CC antirheumatic, cytostatic and immunostimulatory activities. (I) is used
 CC for inhibiting the expression of STAT3 in cells or tissues, treating an
 CC animal having a disease or condition characterised by a reduction in apoptosis,
 CC having a disease or condition characterised by a reduction in apoptosis,
 CC and inducing apoptosis in a cell. Diseases or conditions that are treated
 CC are rheumatoid arthritis, cancer of the breast, prostate, brain, head
 CC and/or neck, leukaemia, myeloma, melanoma or lymphoma. (I) can also be
 CC used for diagnostic methods in detecting and determining the role of
 CC STAT3 in various cell functions, physiological processes and conditions
 CC and for diagnosing the conditions associated with expression of STAT3.
 CC (I) can be used alone or with other drugs as an immunostimulator. (I) is
 CC used in sandwich and colourimetric assays, involving enzyme conjugation
 CC and radiolabeling and is used in diagnostic kits. AAC93150 encodes human
 CC STAT3 and AAC93231 encodes mouse STAT3 as given in the exemplification of
 CC the present invention. AAC93151 to AAC93230 and AAC93232 to AAC93299
 CC represent STAT3 phosphorothioate antisense oligonucleotides, and AAC93300
 CC represents a mismatch control oligonucleotide which are used in example
 CC from the present invention

XX SQ Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.9; DB 1; Length 20;

Best Local Similarity 88.9%; Pred.No. 5.6e+02; Mismatches 2; Indels 0; Gaps 0;

XX QY 922 CTGTTCCAGCTGCTCCGT 939

XX Db 2 CTGTTCCAGCTGCTCCAT 19

RESULT 430

AAAF32480/C

ID AAF32480 standard; DNA; 20 BP.

XX AC AAF32480;

XX DT 19-APR-2001 (first entry)

XX DE 1,5-anhydroglucitol dehydrogenase PCR primer SEQ ID NO:24.

XX KW Agrobacterium tumefaciens NT1130; 1,5-anhydroglucitol dehydrogenase;

XX KW 1,5-AGDH; detection; diabetes; diabetes; PCR primer; ss.

XX OS Agrobacterium tumefaciens.

XX XX JF2000316570-A.

XX PN 21-NOV-2000.

XX PF 13-MAY-1999; 99JP-00133157.

PR 13-MAY-1999; 99JP-0013157.
XX (DAILI-) DAIICHI KAKAGU YAKUJIN KK.
XX WPI; 2001-128253/14.
XX A gene encoding 1,5-anhydroglucitol dehydrogenase, a recombinant vector
PT containing the gene, a transformant containing the recombinant vector and
PT a recombinant 1,5-anhydroglucitol dehydrogenase protein prepared from the
PT transformant.
XX
XX Example 2; Page 17; 22pp; Japanese.
XX The present invention describes the 1,5-anhydroglucitol dehydrogenase
CC protein (1,5-AGDH) isolated from Agrobacterium tumefaciens. The 1,5-AGDH
CC protein is useful as a detecting reagent for early stage diabetes. The
CC present sequence represents a PCR primer for 1,5-AGDH, which is used in
CC an example from the present invention
XX
SQ Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 5.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 365 AGAGTGACCGGCTTCAG 382
DB 19 AGAGTGACCGAGCTTGAG 2
RESULT 431
AAI66452/C
ID AAI66452 standard; DNA; 20 BP.
XX
AC AAI66452;
XX
DT 04-DEC-2001 (first entry)
XX
DE Human NADH ubiquinone oxidoreductase 20KD subunit cDNA PCR primer #2.
XX
KW Human; NADH ubiquinone oxidoreductase 20KD subunit; BionADH20; cancer;
KW nervous system disease; retrograde disease; gene therapy; PCR primer; ss.
XX
OS Homo sapiens.
XX
PW CN1302870-A.
XX
PD 11-JUL-2001.
XX
PF 02-NOV-1999; 99CN-00119947.
XX
PR 02-NOV-1999; 99CN-00119947.
XX
PA (SHEN-) SHENGYUAN GENE DEV CO LTD SHANGHAI.
XX
PI Mao Y, Xie Y;
XX
DR WPI; 2001-550584/62.
XX
PT New human NADH ubiquinone oxidoreductase 20KD subunit for treating
PT retrograde diseases in the nervous system and cancer, .
XX
PS Example 3; Page 12 (Disclosure); 21pp; Chinese.
XX The present invention provides the protein and coding sequences of human
CC NADH ubiquinone oxidoreductase 20KD subunit, designated BionADH20. The
CC sequences can be used in the treatment of cancer and retrograde diseases
CC in the nervous system. The present sequence is a PCR primer for the
CC coding sequence of the invention
XX
SQ Sequence 20 BP; 3 A; 5 C; 12 G; 0 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. No. 5.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 554 CCTCAGCGCGGCTCC 571
DB 20 CCTCGGCTGCGGCTCC 3
RESULT 432
AAS96793
ID AAS96793 standard; DNA; 20 BP.
XX
AC AAS96793;
XX
DT 26-FEB-2002 (first entry)
XX
DE Human STAT3 antisense phosphorothioate oligodeoxynucleotide #26.
XX
KW STAT3; human; signal transducer and activator of transcription; ss; STAT;
KW antisense gene therapy; Fas-mediated apoptosis; inflammatory disease;
KW autoimmune disease; rheumatoid arthritis; cancer; breast; prostate; head;
KW neck; brain; leukaemia; myeloma; melanoma; lymphoma; apoptosis;
KW antiinflammatory; immunosuppressive; antirheumatic; antiarthritic;
KW cytostatic.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN US2001029250-A1.
XX
PD 11-OCT-2001.
XX
PF 11-JAN-2001; 2001US-00756881.
XX
PR 08-APR-1999; 99US-00288461.
PR 06-APR-2000; 2000WO-US009034.
XX
PA (KARR/) KARRAS J G.
XX
PI Karras JG;
XX
DR WPI; 2002-009991/01.
XX
PT Novel antisense compound useful for treating and diagnosing inflammatory
PT diseases and cancers, is targeted to a nucleic acid molecule encoding
PT signal transducer and activator of transcription proteins..
XX
PS Example 2; Page 13; 21pp; English.
XX The invention relates to antisense compounds targeted to a nucleic acid
CC molecule encoding a signal transducer and activator of transcription
CC (STAT) protein, specifically STAT3, where the antisense compounds inhibit
CC the expression of STAT3. The antisense sequences are useful for
CC inhibiting the expression of STAT3 in cells or tissues, inducing Fas-
CC mediated apoptosis in cells, and sensitising cells to apoptosis. They are
CC also useful for treating an animal having a disease or condition
CC associated with STAT3. These disorders include inflammatory or autoimmune
CC disease, particularly rheumatoid arthritis, cancers, such as those of the
CC breast, prostate, brain and head and neck and leukaemias, myelomas,
CC melanomas and lymphomas. Also treatable are human diseases or conditions
CC characterised by a reduction in apoptosis or an insensitivity to
CC apoptotic signals. The sequences of the invention can be used in clinical
CC research, for detecting and determining the role of STAT3 in various cell
CC functions and physiological processes and for diagnosing conditions
CC associated with the expression of STAT3. The sequences represent cDNA
CC encoding human STAT3 and human STAT3 oligonucleotides
XX
SQ Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 5.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 922 CTGTTCCAGCTGCTCGGT 939
Db 2 CTGTTCCAGCTGCTCAT 19

RESULT 433

ABL45558

XX ABL45558 standard; DNA; 20 BP.

XX ABL45558;

XX DT 11-APR-2002 (first entry)

XX Human chromosome 21q22.1 PCR primer SEQ ID NO:2602.

XX Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;

XX PCR primer; ss.

XX OS Homo sapiens.

XX JP2001321190-A.

XX 20-NOV-2001.

XX 12-MAR-2001; 2001JP-00068285.

XX 10-MAR-2000; 2000JP-00066716.

XX (RIKA) RIKAGAKU KENKYUSHO.

XX (GENO-) GENOTEX YG.

XX WPI; 2002-144136/19.

XX Arraying genome clones.

XX Claim 6; Page 56; 528pp; Japanese.

XX The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in multiwell plates; (b) a primer designed based on the chromosome marker sequence is added to the mixture to carry out an amplification reaction; (c) a signal corresponding to the marker is detected from the resultant amplified product to specify the discrimination Nos. of the multiwell plates containing the clones having said marker sequence; (d) the order of the markers is changed so that the same discrimination Nos. succeed to the maximum in the specified discrimination Nos. to array the multiwell plates; (e) the clones in the multiwell plates of the specified discrimination Nos. are mixed respectively in each wells of longitudinal and lateral directions; (f) the mixed clones are cultured and the resultant cultures are amplified by using the above primer; (g) signals are detected from the amplified products; (h) the clones in the multiwell plates are specified from the detected result; and (i) the clones are reconstituted as the positions on the chromosome and arrayed. The microarray is useful for gene analysis. ABL42957 to ABL45322 represent PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634 represent PCR primers for human chromosome 21q22.1, which are specifically claimed for use in the present invention

XX Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.88; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 5.6e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1416 TCGAATTCGGATCTCCGC 1433

Db 2 TCGAATTCGGATCTCAGC 19

RESULT 434

AAD35074

ID AAD35074 standard; DNA; 20 BP.

XX AC AAD35074;
XX DT 25-JUL-2002 (first entry)
XX Human Stat3 antisense oligonucleotide #8.
XX Human; signal transducer and activator of transcription 3; ischaemia;
XX immune response; Stat3; coronary atherosclerosis; vascular occlusion;
XX hypoxia; stroke; angiogenesis; myocardial infarction; hypoglycaemia;
XX inflammation; chronic obstructive pulmonary disease; cardiac arrest;
XX insulin dependent diabetes mellitus; emphysema; trauma; scleroderma;
XX shock; chronic active hepatitis; adult respiratory distress syndrome;
XX nitrogen necrosis; proliferative angiopathy; autoimmune thyroiditis;
XX Sjogren's syndrome; multiple sclerosis; Addison's disease; epilepsy;
XX polymyositis; rheumatoid arthritis; autoimmune infertility; anaemia;
XX proliferative disease; Grave's disease; ulcerative colitis; sarcoma;
XX carcinoma; degenerative disorder; gene therapy; growth deficiency;
XX cirrhosis; hypoproliferative disorder; lesion; antisense; ss.
XX OS Homo sapiens.
XX WO200220032-A1.
XX 14-MAR-2002.
XX 10-SEP-2001; 2001WO-US028254.
XX 08-SEP-2000; 2000US-0231212P.
XX (UYJO) UNIV JOHNS HOPKINS.
XX (UYSF-) UNIV SOUTH FLORIDA.
XX Yu H, Pardoll D, Jove R, Dalton W;
XX WPI; 2002-362218/39.
XX Modulating angiogenesis and an immune response in an individual, for
XX treating a hypoxic or ischemic condition, comprises administering a
XX compound that modulates the activity of a signal transducer and activator
XX of transcription 3.
XX Disclosure; Page 32; 94pp; English.
XX The invention relates to a method of modulating angiogenesis and immune
XX response. Method involves administering to an individual a compound that
XX modulate the activity of signal transducer and activator of transcription
XX 3 (Stat3). Modulating angiogenesis is useful for treating or preventing
XX hypoxic or ischaemic condition or disorder which is the result of stroke,
XX ischaemia, coronary atherosclerosis, myocardial infarction, inflammation,
XX tissue ischaemia in the lower extremities, infarction, trauma, vascular
XX occlusion, prenatal or postnatal oxygen deprivation, suffocation, shock,
XX chronic obstructive pulmonary disease, choking, asphyxia, hypoglycaemia,
XX epilepsy, emphysema, adult respiratory distress syndrome, cardiac arrest,
XX nitrogen necrosis, proliferative angiopathy e.g. diabetic microangiopathy
XX with neovascularisation. Suppressing an immune response is useful for
XX ameliorating a symptom of an autoimmune disease such as systemic lupus
XX erythematosus, multiple sclerosis, insulin dependent diabetes mellitus,
XX Sjogren's syndrome, scleroderma, polymyositis, chronic active hepatitis,
XX mixed connective tissue disease, primary biliary cirrhosis, pernicious
XX anaemia, autoimmune thyroiditis, idiopathic Addison's disease, vitiligo,
XX gluten-sensitive enteropathy, autoimmune neutropenia, myasthenia gravis,
XX idiopathic thrombocytopenia purpura, Grave's disease, Goodpasture's
XX disease, rheumatoid arthritis, cirrhosis, pemphigus vulgaris, autoimmune
XX infertility, bullous pemphigoid, discoid lupus, ulcerative colitis and
XX dense deposit disease. The method is useful in preventing or treating
XX specific proliferative and oncogenic disease which includes sarcomas and
XX carcinomas e.g., bladder carcinoma, colon carcinoma, chronic leukaemia,
XX fibrosarcoma, liposarcoma, degenerative disorders, growth deficiency,
XX hypoproliferative disorders, physical trauma, lesions and wounds. The
XX method is also used in gene therapy. The present sequence is human Stat3
XX antisense oligonucleotide

SQ Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 5.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 922 CTGTTCCAGCTGCTCCGT 939
| | | | | | | | | | | | | | | | | |
Db 2 CTGTTCCAGCTGCTGCAT 19

RESULT 435
ABZ93374/C

ID ABZ93374 standard; DNA; 20 BP.

XX AC ABZ93374;

XX DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; anti-allergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX XN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPTG-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX PL Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.

XX PS Disclosure; SEQ ID NO 8616; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, anti-allergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WFO
CC at ftp.wipo.int/pub/published_pct_sequences

XX

SQ Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 5.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1291 CTGTCGAACGAGGAGTTC 1308
| | | | | | | | | | | | | | | | | |
Db 20 CCGTCCATCGAGGAGTTC 3

RESULT 436
ABX09073/C

ID ABX09073 standard; DNA; 20 BP.

XX AC ABX09073;

XX DT 22-JAN-2003 (first entry)

XX DE Human dual specific phosphatase 5 phosphorothioate oligonucleotide #12.

XX KW Human; dual specific phosphatase 5; ss; developmental disorder;
KW hyperproliferative disorder; inflammatory disorder aberrant apoptosis;
KW antiinflammatory; cytostatic; antiapoptotic; antiproliferative;
KW phosphorothioate oligonucleotide.

XX OS Homo sapiens.

XX OS Synthetic.

XX XN WO200297108-A2.

XX PD 05-DEC-2002.

XX PF 15-MAY-2002; 2002WO-US015305.

XX PR 25-MAY-2001; 2001US-00865993.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Monia BP, Watt AT;

XX DR WPI; 2003-041418/03.

XX PT Antisense modulation of dual specific phosphatase 5 expression used in
PT treating disorders e.g. inflammatory diseases.

XX PS Example 15; Page 84; 110pp; English.

XX CC The invention relates to a compound 8-50 nucleobases in length targeted
CC to a nucleic acid molecule encoding dual specific phosphatase 5, where
CC the compound specifically hybridises with and inhibits the expression of
CC dual specific phosphatase 5. The compound is used for treating an animal
CC having a disease or condition associated with dual specific phosphatase 5
CC such as a hyperproliferative disorder, a developmental disorder, an
CC inflammatory disorder or a disease which arises from aberrant apoptosis.
CC Sequences ABX09062-ABX09139 represent human dual specific phosphatase 5
CC phosphorothioate oligonucleotides of the invention

XX SQ Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 5.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 953 GCCACCGGCGAAGGTGC 970
| | | | | | | | | | | | | | | | | |
Db 19 GCCACTGCGCAGAAGCTGC 2

RESULT 437
ACC69706

ID ACC69706 standard; DNA; 20 BP.

XX

```
AC ACC69706;
XX
XX 21-JUL-2003 (first entry)
XX
XX Mouse CLASP-5 PCR primer SEQ ID NO:85.
XX
XX Human; mouse; CLASP membrane protein; CLASP; cell surface molecule;
XX cadherin-like asymmetry protein; immune response; immunosuppressive;
XX antiinflammatory; antirheumatic; antiarthritic; dermatological;
XX nephrotropic; autoimmune disease; Addison's disease; dermatitis;
XX rheumatoid arthritis; organ rejection; graft-versus-host disease;
XX inflammation; sepsis; arthritis; nephritis; infectious disease;
XX PCR primer; ss.
XX
XX Mus sp.
XX Synthetic.
XX
XX WO2003025120-A2.
XX
XX 27-MAR-2003.
XX
XX 02-AUG-2002; 2002WO-US024482.
XX
XX 03-AUG-2001; 2001US-0310028P.
XX
XX 15-OCT-2001; 2001US-00978244.
XX
XX (ARBO-) ARBOR VITA CORP.
XX
XX Lu PS, Garman JD, Candia AF;
XX
XX WPI; 2003-354593/33.
XX
XX New cadherin-like asymmetry protein (CLASP) polypeptides and
XX polynucleotides, useful for treating or preventing autoimmune diseases,
XX organ rejection or graft-versus-host disease, inflammation, or infectious
XX diseases.
XX
XX Example 2; Page 119; 398pp; English.
XX
XX ACC69640 to ACC69648 encode the cadherin-like asymmetry proteins (CLASPs)
XX given in ABR43625 to ABR43633. CLASP sequences have immunosuppressive,
XX antiinflammatory, antirheumatic, antiarthritic, dermatological and
XX nephrotropic activities. Compositions comprising a CLASP-1 protein can be
XX used for treating or preventing a CLASP-1 mediated disease, particularly
XX an autoimmune disease caused or exacerbated by increased activity of TH1
XX (helper T) cells. CLASP polynucleotides can be used as probes or primers
XX for detecting CLASP expression, for screening CLASP agonists or
XX antagonists, for creating transgenic animals, chromosome mapping,
XX identifying animals from minute biological samples, polymorphic markers
XX for forensic analysis, and as reagents for paternity testing. CLASP
XX polynucleotides or polypeptides are useful in treating or preventing
XX autoimmune diseases (e.g. Addison's disease, rheumatoid arthritis, or
XX dermatitis), organ rejection or graft-versus-host disease, inflammation
XX (e.g. sepsis, arthritis or nephritis), or infectious diseases. ACC69649
XX to ACC69727 and ABR43634 to ABR43642 represent sequences given in the
XX exemplification of the present invention
XX
XX Sequence 20 BP; 10 A; 5 C; 2 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 5.6e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 889 AACATCATCAACATGCAC 906
XX |||||
XX 3 AACATCATCAACAGGAC 20
XX
XX RESULT 438
XX ABZ70994/C
XX ID ABZ70994 standard; DNA; 20 BP.
XX
XX AC ABZ70994;
```

```
XX
XX 28-APR-2003 (first entry)
XX
XX Human HKR1 phosphorothioate antisense oligonucleotide SEQ ID NO:22.
XX
XX Human; HKR1; cytostatic; HKR1 inhibitor; hyperproliferative disorder;
XX cancer; antisense oligonucleotide; 2'-O-methoxyethyl; 2'-MOE; control;
XX phosphorothioate; ss.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= a
XX /mod_base= OTHER
XX /note= "phosphorothioate linkages"
XX
XX modified_base 1..5
XX /tag= b
XX /mod_base= OTHER
XX /note= "2'-O-methoxyethyl (2'-MOE) nucleotides"
XX
XX modified_base 16..20
XX /tag= c
XX /mod_base= OTHER
XX /note= "2'-O-methoxyethyl (2'-MOE) nucleotides"
XX
XX WO2003004513-A1.
XX
XX 16-JAN-2003.
XX
XX 02-JUL-2002; 2002WO-US021090.
XX
XX 03-JUL-2001; 2001US-00898556.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett FC, Freier SM;
XX
XX WPI; 2003-210336/20.
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
XX nucleic acid encoding HKR1, useful for treating a disease/condition
XX associated with HKR1, such as hyperproliferative disorder, e.g. lung,
XX brain or breast cancer.
XX
XX Example 15; Page 72; 105pp; English.
XX
XX The present invention describes a compound 8-50 nucleobases in length
XX targeted to, and which specifically hybridizes with a nucleic acid
XX molecule encoding HKR1, and inhibits the expression of HKR1. Also
XX described: (1) a compound 8-50 nucleobases in length that specifically
XX hybridizes with at least an 8-nucleobase portion of an active site on a
XX nucleic acid molecule encoding HKR1; (2) a composition comprising the
XX compound and a carrier or diluent; (3) a method for inhibiting the
XX expression of HKR1 in cells or tissues by contacting the cells or tissues
XX with the compound so that expression of HKR1 is inhibited; and (4) a
XX method of treating an animal having a disease or condition associated
XX with HKR1 by administering to the animal a therapeutic or prophylactic
XX amount of the compound so that expression of HKR1 is inhibited. HKR1
XX antisense oligonucleotides have cytostatic activities and can be used as
XX HKR1 inhibitors. The compound, composition and methods are useful for
XX treating a disease or condition associated with HKR1, such as a
XX hyperproliferative disorder, e.g. lung, brain or breast cancer, by
XX inhibiting the expression of HKR1. They are also useful in research and
XX diagnostics for modulating the expression of HKR1. The present sequence
XX represents a human HKR1 chimeric phosphorothioate oligonucleotide having
XX 2'-O-methoxyethyl (2'-MOE) wings and a deoxy gap, which is an antisense
XX oligonucleotide used in the inhibition of human HKR1 in an example from
XX the present invention
XX
XX Sequence 20 BP; 3 A; 3 C; 8 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 5.6e+02;
```

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 673 AGCAAGCTCAGCAAC 690
 |||||
 Db 18 AGCAAGCTCAGCAAC 1

RESULT 439
 ACF39677/C
 ID ACF39677 standard; DNA; 20 BP.
 XX
 AC ACF39677;
 XX
 DT 29-SEP-2003 (first entry)
 XX
 XX MHC class II transactivator antisense oligonucleotide SEQ ID NO:80.

DE Human; major histocompatibility complex class II transactivator;
 KW MHC class II transactivator; antisense modulation; immunosuppressive;
 KW antimicrobial; antidiabetic; antirheumatic; antiarthritic; cytostatic;
 KW neurotropic; neuroprotective; immunostimulant; autoimmune disorder;
 KW MHC class II transactivator inhibitor; infection; transplant rejection;
 KW diabetes; rheumatoid arthritis; cancer; Alzheimer's disease;
 KW multiple sclerosis; severe combined immunodeficiency disease;
 KW phosphorothioate; antisense oligonucleotide; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.

XX Key Location/Qualifiers
 FH modified_base 1..20
 FT /*tag= a
 FT /*mod_base= OTHER
 FT /*note= "phosphorothioate linkages; all cytidine residues
 FT are 5-methylcytidines"
 FT modified_base 1..5
 FT /*tag= b
 FT /*mod_base= OTHER
 FT /*note= "2'-O-methoxyethyls"
 FT modified_base 16..20
 FT /*tag= c
 FT /*mod_base= OTHER
 FT /*note= "2'-O-methoxyethyls"
 XX WO2003050247-A2.
 XX
 XX 19-JUN-2003.
 XX
 XX 04-DEC-2002; 2002WO-US038616.
 XX
 XX 05-DEC-2001; 2001US-00006366.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Bennett FC, Dobie KW;
 XX
 XX WPI; 2003-577294/54.
 XX
 XX New antisense oligonucleotides for modulating MHC class II transactivator
 PT gene expression, particularly useful for treating autoimmune disorders
 PT such as transplant rejection, Alzheimer's disease, or multiple sclerosis,
 PT or infection.
 XX
 XX Example 15; Page 84; 129pp; English.

XX The present invention describes a compound (I) that is 8-50 nucleobases
 CC in length: (a) targets a nucleic acid molecule encoding major
 CC histocompatibility complex (MHC) class II transactivator, and
 CC specifically hybridises with the nucleic acid encoding the MHC class II
 CC transactivator, and inhibits the expression of MHC class II
 CC transactivator; or (b) specifically hybridises with at least an 8-
 CC nucleobase portion of an active site on a nucleic acid molecule encoding
 CC MHC class II transactivator. (I) has immunosuppressive, antimicrobial,

CC antidiabetic, antirheumatic, antiarthritic, cytostatic, neurotropic,
 CC neuroprotective and immunostimulant activities, and can be used as an MHC
 CC Class II transactivator inhibitor. The MHC class II transactivator
 CC antisense oligonucleotides can be used for treating an animal having a
 CC disease or condition associated with MHC class II transactivator, e.g.
 CC autoimmune disorder or infection. The antisense oligonucleotides can be
 CC used for inhibiting the expression of MHC class II transactivator in
 CC cells or tissues. In particular, these diseases include transplant
 CC rejection, diabetes, rheumatoid arthritis, cancer, Alzheimer's disease,
 CC multiple sclerosis, or severe combined immunodeficiency disease. The
 CC antisense compounds are useful for diagnostics, prophylaxis, or as
 CC research reagents or kits. The present sequence represents a human MHC
 CC class II transactivator chimeric phosphorothioate antisense
 CC oligonucleotide, which is used in an example from the present invention
 XX
 XX Sequence 20 BP; 4 A; 4 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 5.6e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1567 CCTGACTCAGGAGCCCA 1584
 |||||
 Db 19 CCTGACTCAGGAGCTCA 2

RESULT 440
 ADC98368/C
 ID ADC98368 standard; DNA; 20 BP.
 XX
 AC ADC98368;
 XX
 DT 01-JAN-2004 (first entry)
 XX
 XX IGF503 polymorphism marker PCR primer B primer seq.
 DE
 XX low bone mineral density; BMD; bone damage; polymorphism; osteoporosis;
 KW single nucleotide polymorphism; SNP; PCR primer; ss; human.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 XX WO2003054218-A2.
 XX
 XX 03-JUL-2003.
 XX
 XX 19-DEC-2002; 2002WO-US040948.
 XX
 XX 20-DEC-2001; 2001US-0342711P.
 XX 04-NOV-2002; 2002US-0423559P.
 XX
 XX (INCY-) INCYTE GENOMICS INC.
 XX
 XX Jones KA, Valdes A, Townley DJ, Mangion J, Galwey N, Bennett S;
 XX McKay I, Schafer A;
 XX
 XX WPI; 2003-559156/52.

XX Determining whether an individual is predisposed to susceptibility to low
 PT bone mineral density (BMD) and/or bone damage, involves identifying
 PT polymorphisms in associated genes.

XX Example 8; Page 237; 246pp; English.

XX The present invention describes a method of determining whether an
 CC individual is predisposed to susceptibility to low bone mineral density
 CC (BMD) and/or bone damage comprising identifying whether the individual
 CC has at least one polymorphism in a polynucleotide encoding a protein,
 CC where the polynucleotide is one of 81 200-500 nucleotide sequences (S1,
 CC see ADC98235 to ADC98315). An agent identified in a method from the
 CC present invention which can be used for the prevention or treatment of a
 CC disease resulting in susceptibility to low BMD and/or bone damage is
 CC useful in the manufacture of a medicament for use in modulating the

CC susceptibility to low BMD and/or bone damage. The disease associated with
 CC low BMD and/or bone damage is osteoporosis. The present PCR primer
 CC sequence is used in the exemplification of the present invention.

SQ Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 5.6e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 311 TCAGCTCTGCACGAGAGA 328
 Db 18 TCATCTCTGCACCTGAGA 1

RESULT 441

ADE28924

ID ADE28924 standard; DNA; 20 BP.

XX ADE28924;

AC ADE28924;

DT 29-JAN-2004 (first entry)

XX Forward Ag5335 RT-PCR primer used to amplify human NOV RNA.

DE NOVX; antidiabetic; anorectic; cardiant; hypotensive;

XX antiarteriosclerotic; virucide; antibacterial; fungicide; protozoacide;

KW nootropic; neuroprotective; antiparkinsonian; anticonvulsant;

KW osteopathic; antiarthritic; antiinflammatory; dermatological;

KW antiasthmatic; antilipemic; metabolic; diabetes; obesity; infectious;

KW anorexia; cancer; cardiovascular; hypertension; atherosclerosis;

KW neurodegenerative; Alzheimer's disease; Parkinson's; epilepsy; immune;

KW osteoarthritis; haemopoietic; inflammatory skin; asthma; dyslipidaemia;

KW wound healing; angiogenesis; gene therapy; proliferation; haemopoiesis;

KW tissue typing; human; NOV; PCR; primer; ss; RT-PCR.

XX Homo sapiens.

OS WO2003040330-A2.

XX 15-MAY-2003.

XX 05-NOV-2002; 2002WO-US035536.

XX 05-NOV-2001; 2001US-0338626P.

XX 05-DEC-2001; 2001US-033600P.

XX 07-DEC-2001; 2001US-0338285P.

XX 12-DEC-2001; 2001US-0341346P.

XX 17-DEC-2001; 2001US-0341477P.

XX 17-DEC-2001; 2001US-0341540P.

XX 20-DEC-2001; 2001US-0342592P.

XX 27-DEC-2001; 2001US-0344297P.

XX 31-DEC-2001; 2001US-0344903P.

XX 17-APR-2002; 2002US-0373288P.

XX 15-MAY-2002; 2002US-0380981P.

XX 17-MAY-2002; 2002US-0381495P.

XX 28-MAY-2002; 2002US-0383534P.

XX 28-MAY-2002; 2002US-0383744P.

XX 29-MAY-2002; 2002US-0383829P.

XX 29-MAY-2002; 2002US-0384024P.

XX 07-AUG-2002; 2002US-0401788P.

XX 26-AUG-2002; 2002US-040353P.

XX 31-OCT-2002; 2002US-0028791.

XX (CURA-) CURAGEN CORP.

XX Alsobrook JP, Alvarez E, Anderson DW, Baxon M, Boldog FL;

PI Burgess CE, Casman SJ, Chapoval A, Dhanabal M, Edinger SR, Eisen A;

PI Ellerman K, Eitenberg S, Gangolli EA, Gerlach VL, Gorman L;

PI Grosse WM, Guo X, Hackett C, Ji W, Kekuda R, Khrantsov NV;

PI Lepley DM, Li L, Macdougall JR, Malyankar UM, Mazur A, Mcqueeney K;

PI Mezes PS, Miller CE, Millet I, Mishra VS, Padigaru M, Patturajan M;

PI

PI Pena CBA, Peyman JA, Rastelli L, Rieger DK, Shenoy SG, Shinkets RA;
 PI Smithson G, Starling G, Spytek KA, Stone DJ, Tchernev VT, Twomlow N;
 PI Vernet CAM, Zerhusen BD, Zhong M;
 XX WPI; 2003-441555/41.

XX New isolated NOVX polypeptides and polynucleotides, useful for
 PT preventing, diagnosing or treating NOVX-associated disorders, e.g.
 PT osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,
 PT asthma, or infections.

XX Example C; SEQ ID NO 301; 447pp; English.

XX The invention relates to a novel isolated NOVX polypeptide. The
 CC polypeptide of the invention demonstrates, antidiabetic, anorectic,
 CC cardiant, hypotensive, antiarteriosclerotic, virucide, antibacterial,
 CC fungicide, protozoacide, nootropic, neuroprotective, antiparkinsonian,
 CC anticonvulsant, osteopathic, antiarthritic, antiinflammatory,
 CC dermatological, antiasthmatic and antilipemic activities. The
 CC polypeptides, nucleic acid molecules and antibodies may be useful for
 CC treating or diagnosing diseases including metabolic disorders such as
 CC diabetes and obesity, infectious diseases, anorexia, cancer,
 CC cardiovascular diseases including hypertension and atherosclerosis,
 CC neurodegenerative disorders such as Alzheimer's disease, Parkinson's
 CC disease and epilepsy, immune disorders e.g. osteoarthritis, haemopoietic
 CC disorders, inflammatory skin disorders, asthma and dyslipidaemia.
 CC Furthermore, the nucleic acids and polypeptides may also be used to
 CC identify molecules that modulate or inhibit neurogenesis, cell
 CC differentiation and proliferation, haemopoiesis, wound healing and
 CC angiogenesis, as well as in gene therapy. Finally, the nucleic acids may
 CC be used as hybridisation probes, in chromosome mapping, tissue typing,
 CC preventive medicine and pharmacogenomics. The current sequence is that of
 CC the RT-PCR primer which was used within the exemplification of the
 CC invention.

XX Sequence 20 BP; 7 A; 4 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 5.6e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1530 GCTACAAAAGGAGGCCAG 1547

Db 1 GCTACAAAAGGAGGCCAG 18

RESULT 442

AA09234

ID AA09234 standard; DNA; 21 BP.

XX AA09234;

XX 24-MAR-1999 (first entry)

DE Human biallelic polymorphic marker upstream primer #114.

XX Polymorphism; biallelic; human; forensic; paternity testing; disease;

KW detection; phenotypic typing; characteristic; infection; hereditary;

KW autoimmune disease; cancer; inflammation; drug; therapy; medicament;

KW treatment; marker; primer; ss.

XX Synthetic.

OS Homo sapiens.

XX WO9820165-A2.

XX 14-MAY-1998.

XX 05-NOV-1997; 97WO-US020313.

XX 06-NOV-1996; 96US-0030455P.

XX (WHED) WHITEHEAD INST BIOMEDICAL RES.

XX Lander ES, Wang D, Hudson T;
 XX WPI; 1998-286974/25.
 XX
 XX New isolated nucleic acid segments from the human genome - used for
 PT determining polymorphic forms for use in e.g. forensics, paternity
 PT testing or phenotypic typing for disease.
 XX
 XX Claim 15; Page 59; 310pp; English.
 XX
 XX AAX0912H-X10268 are allele-specific oligonucleotide primers used in the
 CC isolation of various diallelic polymorphic markers found in the human
 CC genome (represented in AAX10269-X12937). These primers can be used in a
 CC method for determining polymorphic forms in an individual for use in e.g.
 CC forensics, paternity testing or for phenotypic typing for diseases such
 CC as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
 CC dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial
 CC hypercholesterolemia, polycystic kidney disease, hereditary
 CC spherocytosis, von Willebrand's disease, tuberculous sclerosis, hereditary
 CC haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos
 CC syndrome, osteogenesis imperfecta, acute intermittent porphyria,
 CC autoimmune diseases, inflammation, cancer, diseases of the nervous
 CC system, infection by pathogenic microorganisms, and characteristics such
 CC as longevity, appearance (e.g. baldness, obesity), strength, speed,
 CC endurance, fertility, and susceptibility or receptivity to particular
 CC drugs or therapeutic treatments. The isolated polymorphic nucleic acid
 CC segments can also be used to produce medicaments for the treatment or
 CC prophylaxis of such diseases
 XX
 XX Sequence 21 BP; 1 A; 9 C; 0 G; 11 T; 0 U; 0 Other;
 SQ

Query Match 0.8%; Score 14.8; DB 1; Length 21;
 Best Local Similarity 88.9%; Pred. No. 5.9e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 826 TCCTCACCCTTCTCTTT 843
 Db 1 TTCTCACCCTTCTCTTT 18

RESULT 443
 AAV43747
 ID AAV43747 standard; DNA; 21 BP.
 XX
 XX AAV43747;
 AC
 XX
 XX 16-NOV-1998 (first entry)
 DT
 XX
 XX Cancer associated gene primer 16.
 DE
 XX ss; cancer; PCR; Northern blotting; ribonuclease protection assay;
 XX diagnosis; metastatic cancer; primer; amplification.
 XX
 XX Synthetic.
 OS
 XX
 XX WO9837187-A1.
 PN
 XX 27-AUG-1998.
 PD
 XX
 XX 18-FEB-1998; 98WO-JP000667.
 PF
 XX
 XX 21-FEB-1997; 97JP-00052508.
 PR
 XX
 XX (TAKI) TAKARA SHUZO CO LTD.
 PA
 XX
 XX Yoshikawa Y, Mukai H, Asada K, Hino F, Kato I;
 XX
 XX WPI; 1998-467552/40.
 XX
 XX Detection of cancer cells in tissue samples - by changes in mRNA
 PT expression compared to normal tissue of specific cancer-associated gene
 PT sequences.

XX
 PS Disclosure; Page 71; 92pp; Japanese.
 XX
 XX The primers AAV43732-V43776 were to produce cancer associated gene
 CC fragments which can be used to detect cancer cells in tissue samples or
 CC biological fluids. They are detected by monitoring the change in mRNA
 CC expression as compared to normal tissue of one or more cancer-associated
 CC genes whose cDNA stringently hybridises to the nucleic acid fragments.
 CC The change in expression may be an increase or a decrease compared to
 CC normal tissue. The mRNA expression may be determined by PCR, Northern
 CC blotting or ribonuclease protection assay, or by determining the change
 CC in the amount of protein encoded by the gene(s) as compared to normal
 CC tissue, for example by using a labelled antibody recognising the protein.
 CC Detection of cancer cells for cancer diagnosis, including detection of
 CC metastatic cancer cells in tissues other than the primary tumour site
 XX
 XX Sequence 21 BP; 9 A; 7 C; 2 G; 3 T; 0 U; 0 Other;
 SQ

Query Match 0.8%; Score 14.8; DB 1; Length 21;
 Best Local Similarity 88.9%; Pred. No. 5.9e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1311 GACATACAACTACCCCAA 1328
 Db 2 GAACACAACTACCCCAA 19

RESULT 444
 AAZ26230
 ID AAZ26230 standard; DNA; 21 BP.
 XX
 XX AAZ26230;
 AC
 XX
 XX 30-NOV-1999 (first entry)
 DT
 XX
 XX Human polymorphic region 419.
 DE
 XX
 XX Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;
 KW cell viability; loss of heterozygosity; precancerous condition; ASI;
 KW allele specific inhibitor; somatic cell; diagnosis; prevention;
 KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;
 KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;
 KW graft versus host disease; malignant cell removal; bone marrow; ss.
 XX
 XX Homo sapiens.
 OS
 XX
 XX WO9841648-A2.
 PN
 XX
 XX 24-SEP-1998.
 PD
 XX
 XX 19-MAR-1998; 98WO-US005419.
 PF
 XX
 XX 20-MAR-1997; 97US-0041057P.
 PR
 XX
 XX (VARI-) VARIAGENICS INC.
 PA
 XX
 XX Housman D, Ledley FD, Stanton VP;
 PI
 XX WPI; 1998-521232/44.
 DR
 XX
 XX Identifying target genes for allele-specific drugs - used for diagnosis,
 PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,
 PT dysplastic lesions, endometriosis or graft versus host disease.
 XX
 XX Disclosure; Fig 7; 605pp; English.
 PS
 XX
 XX This invention describes a novel method for identifying an inhibitor
 CC potentially useful for treatment of cancer, where the inhibitor is active
 CC on a gene vital for cell growth or viability, and where the gene is
 CC subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
 CC used for preventing the development of cancer in a patient having a
 CC precancerous condition, by administering to the patient a first allele
 CC specific inhibitor (ASI) targeted to an allele of a first essential gene

CC present in cells of the precancerous condition, where the normal somatic
 CC cells of the patient are heterozygous for the first gene, the inhibitor
 CC is active on at least one but less than all allelic forms of the gene
 CC present in a population and targets only one allelic form present in the
 CC normal somatic cells, and the first gene. The products and methods can be
 CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.
 CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic
 CC lesions, benign tumours, endometriosis, polycystic kidney disease, and
 CC graft versus host disease. The method can also be used to remove
 CC malignant cells from bone marrow transplants. AAZ25812-Z26825 represent
 CC human polymorphic sites described in the method of the invention
 XX

SQ Sequence 21 BP; 6 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 21;
 Best Local Similarity 88.9%; Pred. No. 5.9e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 991 CAGAACCTGCTCATCAAC 1008
 DB 2 CAGGAGCTGCTCATCAAC 19

RESULT 445
 AAZ26229
 ID AAZ26229 standard; DNA; 21 BP.
 XX
 AC AAZ26229;
 XX
 DT 30-NOV-1999 (first entry)
 XX
 DE Human polymorphic region 418.

XX Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;
 KW cell viability; loss of heterozygosity; precancerous condition; ASI;
 KW allele specific inhibitor; somatic cell; diagnosis; prevention;
 KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;
 KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;
 KW graft versus host disease; malignant cell removal; bone marrow; ss.

XX Homo sapiens.
 XX WO9841648-A2.
 XX 24-SEP-1998.
 XX 19-MAR-1998; 98WO-US005419.
 XX 20-MAR-1997; 97US-0041057P.
 XX (VARI-) VARIAGENICS INC.
 XX Housman D, Ledley FD, Stanton VP;
 PI WPI; 1998-521232/44.

XX Identifying target genes for allele-specific drugs - used for diagnosis,
 PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,
 PT dysplastic lesions, endometriosis or graft versus host disease.
 XX Disclosure; Fig 7; 605pp; English.

XX This invention describes a novel method for identifying an inhibitor
 CC potentially useful for treatment of cancer, where the inhibitor is active
 CC on a gene vital for cell growth or viability, and where the gene is
 CC subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
 CC used for preventing the development of cancer in a patient having a
 CC precancerous condition, by administering to the patient a first allele
 CC specific inhibitor (ASI) targeted to an allele of a first essential gene
 CC present in cells of the precancerous condition, where the normal somatic
 CC cells of the patient are heterozygous for the first gene, the inhibitor
 CC is active on at least one but less than all allelic forms of the gene
 CC present in a population and targets only one allelic form present in the

CC normal somatic cells, and the first gene. The products and methods can be
 CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.
 CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic
 CC lesions, benign tumours, endometriosis, polycystic kidney disease, and
 CC graft versus host disease. The method can also be used to remove
 CC malignant cells from bone marrow transplants. AAZ25812-Z26825 represent
 CC human polymorphic sites described in the method of the invention
 XX

SQ Sequence 21 BP; 7 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 21;
 Best Local Similarity 88.9%; Pred. No. 5.9e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 991 CAGAACCTGCTCATCAAC 1008
 DB 3 CAGGAGCTGCTCATCAAC 20

RESULT 446
 ABZ76238/c
 ID ABZ76238 standard; DNA; 21 BP.
 XX
 AC ABZ76238;
 XX
 DT 12-JUN-2003 (first entry)
 XX
 DE Murine chemokine receptor CCR1 specific RT-PCR reverse primer.
 XX CCR1; renal fibrosis; chemokine receptor; antiinflammatory; nephrotropic;
 KW collagen; mouse; RT-PCR; primer; ss.

XX Mus sp.
 OS WO2003013656-A2.
 PN 20-FEB-2003.
 PD 05-AUG-2002; 2002WO-US024763.
 PF 07-AUG-2001; 2001US-0310538P.
 PR 26-JUL-2002; 2002US-00205713.
 XX (SCHD) SCHERING AG.
 XX Horuk R;
 PI WPI; 2003-278443/27.

XX Composition for treating progressive renal fibrosis comprises non-peptide
 PT chemokine CCR1 receptor antagonist, especially arylmethylpiperazine
 PT derivative.
 XX Example 6; Page 23; 43pp; English.

XX The invention relates to a composition for treating progressive renal
 CC fibrosis in mammals (preferably humans) and involves a non-peptide
 CC chemokine CCR1 receptor antagonist. The compositions are useful for
 CC treating progressive renal fibrosis in humans and in cats, dogs, pigs,
 CC cattle, sheep, goats, horses and rabbits. Sequences ABZ76231-245
 CC represent oligonucleotide primers and probes used in an in vivo assay of
 CC chemokine receptor and collagen I mRNA expression
 XX

SQ Sequence 21 BP; 2 A; 7 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 21;
 Best Local Similarity 88.9%; Pred. No. 5.9e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 854 ACAAGGACCTGAAGCAGT 871
 DB 21 ACAAGAGCTGAAGCAGT 4

```
RESULT 447
ADD15228
ID ADD15228 standard; DNA; 21 BP.
XX
AC ADD15228;
XX
DT 15-JAN-2004 (first entry)
XX
DE Bacterial cytochrome P450 oligo used to design PCR primers (SeqID 11).
XX
KW epothilone B hydroxylase; ebh; macrolide; microtubule stabilising;
KW cytotoxic; anticancer; neuroprotective; virucidal; antiinflammatory;
KW osteopathic; cancer; angiogenesis; retinal vasculature;
KW aplastic anaemia; restenosis; Alzheimer's disease;
KW systemic lupus erythematosis; AIDS; ss; P450-2+; P450-2-.
XX
OS Bacteria.
XX
PN WO2003057830-A2.
XX
PD 17-JUL-2003.
XX
PF 17-DEC-2002; 2002WO-US040359.
XX
PR 26-DEC-2001; 2001US-0344271P.
XX
PA (BRIM ) BRISTOL-MYERS SQUIBB CO.
XX
PI Basch JD, Chiang S, Liu S, Nayeem A, Sun Y, Li Y;
XX WPI; 2003-627332/59.
XX
PT Novel epothilone B hydroxylase polypeptide, and mutants of the
PT polypeptide which is useful for producing a epothilone analog.
XX
PS Disclosure; SEQ ID NO 11; 127pp; English.
XX
CC This invention relates to novel isolated nucleic acid molecules, and
CC encoded proteins thereof, for epothilone B hydroxylase (ebh).
CC Specifically, it refers to recombinant microorganisms expressing ebh, ebh
CC mutants and/or ferredoxin, which are capable of hydroxylating small
CC organic molecule compounds i.e. epothilones. Epothilones are macrolide
CC compounds produced by Sorangium cellulosum, which have been shown to
CC exert microtubule stabilising effects similar to paclitaxel such that
CC they have cytotoxic activity against rapidly proliferating cells.
CC Accordingly, they are natural anticancer agents with neuroprotective,
CC virucidal, antiinflammatory and osteopathic activities. The present
CC invention describes epothilones and analogues thereof as useful for
CC treating cancers, inhibiting angiogenesis and treating blindness related
CC to retinal vascularisation. Furthermore, they can be used for conditions
CC including aplastic anaemia, restenosis, Alzheimer's disease, systemic
CC lupus erythematosis and AIDS. This oligonucleotide sequence (SeqID 11) is
CC derived from a bacterial cytochrome P450 gene (locus STMSUACB) and used
CC to design PCR primers P450-2+ and P450-2- for the amplification of
CC genomic epothilone B hydroxylase DNA of the invention.
XX
SQ Sequence 21 BP; 3 A; 5 C; 10 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.8; DB 1; Length 21;
Best Local Similarity 88.9%; Pred. No. 5.9e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1218 CACGGTGGAGGACAGCT 1235
| | | | | | | | | |
DB 4 CGCGGTGGAGGACAGCT 21

RESULT 448
AAT02483/C
ID AAT02483 standard; DNA; 22 BP.
XX
AC AAT02483;
XX
DT 05-FEB-1998 (first entry)
XX
DE Primer #2 for immunoglobulin kappa variable region V kappa3-2.
XX
```

```
XX
DT 13-JUN-1996 (first entry)
XX
DE Primer for domain D of the retinoid X receptor beta gene.
XX
KW Steroid/thyroid receptor superfamily; DNA-binding domain; transgenesis;
KW retinoid X receptor; transgenic mouse; development; physiology; therapy;
KW RXR-alpha-deficient; ventricular chamber development; ischaemia; RXR;
KW cardiac hypertrophy; polymerase chain reaction; primer; amplify; PCR;
KW reverse transcriptase; ss.
XX
OS Synthetic.
XX
PN WO9530741-A1.
XX
PD 16-NOV-1995.
XX
PF 09-MAY-1995; 95WO-US005870.
XX
PR 10-MAY-1994; 94US-00241044.
XX
PA (SALK ) SALK INST BIOLOGICAL STUDIES.
PA (REGC ) UNIV CALIFORNIA.
XX
PI Sucov HM, Evans RM, Chien KR;
XX WPI; 1995-404109/51.
XX
PT Transgenic mice expressing low levels of steroid-thyroid receptors -
PT useful for study of role of steroid-thyroid receptors in embryogenesis,
PT e.g. RXR alpha in cardiac development.
XX
PS Example 4; Page 20; 41pp; English.
XX
CC AAT02480-T02483 are amplification primers for regions of the DNA reverse
CC transcribed by the sequence represented in AAT02479. This sequence is a
CC sense primer corresponding to a region of domain D of the retinoid X
CC receptor (RXR) beta gene and was used as a control. The DNA was obtained
CC from transgenic mice that had a mutation in the RXR alpha gene. RXR is a
CC member of the steroid/thyroid receptor superfamily. By mutating the DNA
CC binding domain sequence in one of the steroid/thyroid receptors (e.g. the
CC retinoid X receptor) of a mouse, a transgenic mouse expressing less than
CC endogenous levels of the receptor in at least 1 specific tissue type can
CC be created. The transgenic mouse can then be used as a model for
CC determining the role of members of the steroid/thyroid receptor
CC superfamily in development and physiology. RXR-alpha-deficient mice
CC created in this manner allow for molecular dissection of ventricular
CC chamber development. The mice are also useful for determining the
CC selectivity of a ligand for a steroid/thyroid receptor. The retinoid
CC compounds identified can be used for treating cardiac hypertrophy,
CC ischaemia and other cardiac malfunctions
XX
SQ Sequence 22 BP; 2 A; 11 C; 2 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.8; DB 1; Length 22;
Best Local Similarity 88.9%; Pred. No. 6.2e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 31 CAGAGGTAGGAGGAGGA 48
| | | | | | | | | |
DB 22 CAGAGGTAGGAGGAGGAA 5

RESULT 449
AAT92763
ID AAT92763 standard; DNA; 22 BP.
XX
AC AAT92763;
XX
DT 05-FEB-1998 (first entry)
XX
DE Primer #2 for immunoglobulin kappa variable region V kappa3-2.
XX
```


02-MAR-2000. XX
23-AUG-1999; 99WO-JP004518. XX
21-AUG-1998; 98JP-00236169. XX
(KIRI) KIRIN BEER KK. XX
Tomizuka K, Yoshida H, Hanaoka K, Oshimura M, Ishida I; XX
Kuroiwa Y; PI
WPI; 2000-246479/21. XX
Producing a cell containing modified foreign chromosomes, useful for the XX
generation of transgenic animals. PT
Example 95; Page 180; 316pp; Japanese. XX
The invention relates to a novel method of producing cells containing a XX
modified foreign chromosome or chromosome fragment. The method comprises: XX
(a) fusing a microcell comprising the foreign chromosome or chromosome XX
fragment, with a cell having a high efficiency for homologous XX
recombination; (b) marking the desired site of insertion of the foreign XX
chromosome using a targeting vector; and (c) inducing deletion or XX
translocation at the marked site. Transgenic animals produced by the XX
method are useful to provide disease models and knockout animals, and in XX
the production of human proteins, particularly human antibodies. This XX
sequence is used in the method of the invention XX
Sequence 22 BP; 5 A; 3 C; 8 G; 6 T; 0 U; 0 Other; XX
Query Match 0.8%; Score 14.8; DB 1; Length 22; XX
Best Local Similarity 88.9%; Pred. No. 6.2e+02; XX
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0; XX
356 CTGATGGGGAGAGTGACC 373 XX
3 CTGATGGTGAGAGTGAC 20 XX
RESULT 452 XX
AAA09923 XX
ID AAA09923 standard; DNA; 22 BP. XX
AC AC XX
AAA09923; XX
05-JUL-2000 (first entry) XX
Primer 2 for human immunoglobulin kappa variable region gene VK3-2. XX
Foreign chromosome; microcell fusion; homologous recombination; antibody XX
targeting vector; transgenic animal; disease model; knockout animal; XX
PCR primer; human; ss. XX
Homo sapiens. XX
OS XX
WO200010383-A1. XX
PN XX
PD XX
23-AUG-1999; 99WO-JP004518. XX
21-AUG-1998; 98JP-00236169. XX
(KIRI) KIRIN BEER KK. XX
Tomizuka K, Yoshida H, Hanaoka K, Oshimura M, Ishida I; XX
Kuroiwa Y; PI
WPI; 2000-246479/21. XX
Producing a cell containing modified foreign chromosomes, useful for the XX
generation of transgenic animals. PT

Example 1; Page 55; 315pp; Japanese.

The invention relates to a novel method of producing cells containing a modified foreign chromosome or chromosome fragment. The method comprises: (a) fusing a microcell comprising the foreign chromosome or chromosome fragment, with a cell having a high efficiency for homologous recombination; (b) marking the desired site of insertion of the foreign chromosome using a targeting vector; and (c) inducing deletion or translocation at the marked site. Transgenic animals produced by the method are useful to provide disease models and knockout animals, and in the production of human proteins, particularly human antibodies. This sequence is used in the method of the invention

Sequence 22 BP; 5 A; 3 C; 8 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 22;
Best Local Similarity 88.9%; Pred. No. 6.2e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0

356 CTGATGGCGAGTGACC 373
||||| |||||||
3 CTGATGGTGAGTGAC 20

RESULT 453
AAH39266
ID AAH39266 standard; DNA; 22 BP.
XX AAH39266;
XX AC
XX DT
14-AUG-2001 (first entry)
XX DE
XX SNP specific lower PCR primer SEQ ID 2062.
XX Single nucleotide polymorphism; SNP; single nucleotide primer extension;
XX SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer;
XX Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;
XX polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;
XX acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;
XX inflammation; forensic investigation; paternity analysis; PCR primer; ss.
XX Homo sapiens.
XX OS
XX WO200129262-A2.
XX PD 26-APR-2001.
XX PF 13-OCT-2000; 2000WO-US028436.
XX PR 15-OCT-1999; 99US-0160096P.
XX PA (ORCH-) ORCHID BIOSCIENCES INC.
XX Picoult-Newburg L, Pohl M;
XX WPI; 2001-290930/30.
XX New genotyping oligonucleotide, useful for detecting the presence,
XX absence or identity of single polynucleotide polymorphism in a nucleic
XX acid sample.
Claim 1; Page 60; 83pp; English.
Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide
primer extension (SNPE) primers, and the sequences of regions flanking
sites of single nucleotide polymorphisms SNPs. The present invention
includes kits for determining the presence or absence of a SNP, using the
oligonucleotides of the invention. The PCR primers are used to amplify a
SNP flanking sequence, the SNPE primer is used as a genotyping primer.
The oligonucleotides are useful for genotyping a nucleic acid sample by
performing a single-nucleotide primer extension reaction. The
oligonucleotides are useful for determining the presence or

CC identity of a SNP and for genotyping nucleic acid samples, for e.g. to
CC assess by association analysis the genotype of an individual or group of
CC individuals, having a pathological phenotypic trait suspected of being
CC caused by one or more SNPs. Phenotypic traits include diseases e.g.
CC agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
CC dystrophy, familial hypercholesterolaemia, polycystic kidney disease,
CC osteogenesis imperfecta and acute intermittent porphyria. Phenotypic
CC traits also include symptoms of or susceptibility to multifactorial
CC disease of which a component is or may be genetic such as autoimmune
CC diseases, including, rheumatoid arthritis, multiple sclerosis,
CC inflammation, cancer, nervous system diseases and infection by pathogenic
CC microorganism. The method is also useful in forensic investigations and
CC paternity analysis. The present sequence represents a PCR primer specific
CC for a human SNP containing DNA sequence

SQ Sequence 22 BP; 3 A; 7 C; 2 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 22;
Best Local Similarity 88.9%; Pred. No. 6.2e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1736 GTTCACTGGCCACTTGT 1743
|||||
DB 5 GTTCACTGGCCACTTTT 22

RESULT 454

AAI171720
ID AAI171720 standard; DNA; 22 BP.

AC AAI171720;

DT 15-JAN-2002 (first entry)

DE PCR primer Vkap3-R.

KW PCR primer; chimeric mouse; chromosome 14; chromosome 22;
KW antibody heavy chain gene; light chain lambda gene; ss.

OS Synthetic.

PN JP2001231403-A.

XX 28-AUG-2001.

XX 18-FEB-2000; 2000JP-00042074.

XX 18-FEB-2000; 2000JP-00042074.

XX (KIRI) KIRIN BREWERY KK.

XX WPI; 2001-609926/70.

XX Non-human animals maintaining a modified alien chromosome or its
XX fragment.

XX Example 9; Page 18; 43pp; Japanese.

XX The present invention relates to a chimeric mouse which carries fragments
CC of human chromosomes 14 and 22. The chimeric mouse carries the complete
CC human antibody heavy chain gene from chromosome 14 and the light chain
CC lambda gene from chromosome 22. The present sequence is a PCR primer,
CC which was used in an example from the present invention

SQ Sequence 22 BP; 5 A; 3 C; 8 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 22;
Best Local Similarity 88.9%; Pred. No. 6.2e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 356 CTGATGGGAGAGTGACC 373
|||||
DB 3 CTGATGGTGAGAGTGAAAC 20

RESULT 455

ABT05572/c
ID ABT05572 standard; DNA; 22 BP.

XX ABT05572;

XX 11-OCT-2002 (first entry)

XX NOVX reverse PCR primer SEQ ID No 246.

XX Cytostatic; antidiabetic; anorectic; metabolic; nootropic; antilipaeamic;
KW neuroprotective; antiparkinsonian; anticonvulsant; cerebroprotective;
KW tranqulliser; neuroleptic; antidiabetic; antiulcer; antiinflammatory;
KW anti-HIV; antiallergic; antirheumatic; antiarthritic; NOVX; diabetes;
KW metabolic disorder; obesity; infectious disease; Alzheimer's disease;
KW immune disorder; haematopoietic disorder; dyslipidaemia; chronic disease;
KW metabolic syndrome X; wasting disorder; cancer; neurological disorder;
KW epilepsy; stroke; mental disorder; schizophrenic disorders; goiter;
KW vesicular transport; cystic fibrosis; gastrointestinal disorder;
KW diabetes mellitus; ulcerative colitis; AIDS; allergic reaction;
KW multiple sclerosis; rheumatoid arthritis; transgenic animal;
KW gene therapy; PCR; primer; ss.

XX Unidentified.

XX WO200246409-A2.

XX 13-JUN-2002.

XX 06-DEC-2001; 2001WO-US046586.

XX 06-DEC-2000; 2000US-0251660P.

XX 08-JAN-2001; 2001US-0260326P.

XX 24-JAN-2001; 2001US-0263800P.

XX 20-FEB-2001; 2001US-0269942P.

XX 24-APR-2001; 2001US-0286183P.

XX 20-AUG-2001; 2001US-0313627P.

XX 12-SEP-2001; 2001US-0318712P.

XX (CURA-) CURAGEN CORP.

XX Guo X, Li L, Patturajan M, Shimkets RA, Casman SJ, Malyankar UM;
PI Thernev VT, Vernet CAM, Spytek KA, Shenoy SG, Alsobrook JP;
PI Edinger S, Peyman JA, Stone DJ, Ellerman K, Gangolli EA, Boldog FL;
PI Colman SD, Eisen AJ, Liu X, Padigaru M, Spaderna SK, Zerhusen BD;

XX WPI; 2002-547774/58.

XX Novel isolated polypeptide, designated NOVX, useful for treating or
XX preventing cancer, diabetes, obesity, dyslipidemia, anorexia, and
XX metabolic, neurodegenerative, immune and hematopoietic disorders.

XX Example 2; Page 372; 421pp; English.

XX The invention relates to an isolated polypeptide, designated NOVX,
CC comprising a sequence fully defined in the specification. The isolated
CC protein, its encoding polynucleotide or an antibody created from the
CC protein is useful in the manufacture of a medicament for treating a
CC syndrome associated with a human disease, preferably a NOVX-associated
CC disorder, or for treating or preventing a NOVX-associated disorder in a
CC subject, preferably human. The isolated protein, its encoding
CC polynucleotide or an antibody created from the protein are also useful
CC for treating or preventing metabolic disorders, diabetes, obesity,
CC infectious disease, anorexia, neurodegenerative disorder, Alzheimer's
CC disease, Parkinson's disease, immune disorders, haematopoietic
CC disorders, and various dyslipidaemias, metabolic disturbances associated
CC with obesity, the metabolic syndrome X, wasting disorders associated with
CC chronic diseases, and cancer. The isolated protein, its encoding
CC polynucleotide or an antibody created from the protein are useful for

CC treating or preventing neurological disorders such as epilepsy, stroke,
 CC mental disorders including mood, anxiety, schizophrenic disorders,
 CC disorders of vesicular transport such as cystic fibrosis, diabetes
 CC mellitus, goiter, gastrointestinal disorders including ulcerative
 CC colitis, other conditions associated with abnormal vesicle trafficking
 CC including AIDS, allergic reactions, multiple sclerosis and rheumatoid
 CC arthritis. A cell comprising the vector of the invention is useful for
 CC producing non-human transgenic animals. The polynucleotide of the
 CC invention can be used to treat disorders by gene therapy. This
 CC polynucleotide sequence represents a reverse PCR primer for the
 CC amplification of a sequence relating to the NOVX proteins of the
 CC invention
 XX
 XX Sequence 22 BP; 9 A; 3 C; 6 G; 4 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.8; DB 1; Length 22;
 Best Local Similarity 88.9%; Pred. No. 6.2e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1230 ACAGCTACGCTTCATCTT 1247
 Db 18 ACAGCTGCGCTTCATCTT 1
 RESULT 456
 ACD19499/C
 ID ACD19499 standard; DNA; 22 BP.
 AC ACD19499;
 XX
 XX 25-AUG-2003 (first entry)
 DT
 DE Novel human protein associated PCR primer #5.
 XX
 KW Human; NOVX; gene therapy; endocrine related disease; diabetes;
 KW metabolism-related disease; obesity; central nervous system disorder;
 KW Alzheimer's disease; Parkinson's disease; epilepsy; multiple sclerosis;
 KW schizophrenia; depression; autoimmune disorder; inflammatory disorder;
 KW psoriasis; allergy; lupus erythematosus; asthma; cancer;
 KW inflammatory bowel disease; rheumatoid arthritis; osteoarthritis;
 KW colon cancer; lung cancer; liver cancer; breast cancer; ovarian cancer;
 KW prostate cancer; brain cancer; melanoma; liver disease; liver cirrhosis;
 KW lung disease; emphysema; obstructive pulmonary disease; haemophilia;
 KW stroke; infection; PCR; primer; ss.
 XX
 OS Homo sapiens.
 XX
 XX
 XX WO2003023002-A2.
 XX
 XX 20-MAR-2003.
 PD
 PF 09-SEP-2002; 2002WO-US028539.
 XX
 XX 07-SEP-2001; 2001US-0318120P.
 PR 07-SEP-2001; 2001US-0318130P.
 PR 10-SEP-2001; 2001US-0318430P.
 PR 17-SEP-2001; 2001US-0322836P.
 PR 17-SEP-2001; 2001US-0322781P.
 PR 17-SEP-2001; 2001US-0322816P.
 PR 19-SEP-2001; 2001US-0323519P.
 PR 20-SEP-2001; 2001US-0323631P.
 PR 20-SEP-2001; 2001US-0323636P.
 PR 23-SEP-2001; 2001US-0324969P.
 PR 23-SEP-2001; 2001US-0325091P.
 PR 26-SEP-2001; 2001US-0324990P.
 PR 17-APR-2002; 2002US-0373212P.
 PR 06-SEP-2002; 2002US-00236177.
 XX
 XX (CURA-) CURAGEN CORP.
 PA
 XX
 XX Spytek KA, Paturajan M, Gorman L, Li L, Anderson DW, Zhong M;
 PI Gerlach VL, Vernet CAM, Ellerman K, Berghs C, Rothenberg ME, Guo X;

PI Shimkets RA, Leach MD, Catterton E, Kekuda R, Ji W, Miller CE;
 PI Rieger DK, Taupier RJ, Shenoy SG, Liu X, Padigaru M, Alsobrook JP;
 PI Lopley DM, Edinger SR, Burgess CE;
 XX
 XX WPI; 2003-313242/30.
 XX
 XX New cytoplasmic, nuclear membrane bound or secreted polypeptides (NOVX)
 PT and polynucleotides, useful in gene therapy, e.g. for treating or
 PT preventing obesity, multiple sclerosis, allergy, cancers, hemophilia,
 PT stroke or infections.
 XX
 XX Example 92; Page 465; 586pp; English.
 XX
 XX The invention describes a new isolated polypeptide (NOVX). The NOVX
 CC polypeptide, nucleic acid and antibody are useful as therapeutics,
 CC particularly in the manufacture of a medicament for treating a syndrome
 CC associated with a human disease, which includes a pathology associated
 CC with NOVX polypeptide. The DNA encoding the protein is useful in gene
 CC therapy for treating the disease or condition. In particular, the NOVX
 CC polypeptide or polynucleotide is useful for treating endocrine/
 CC metabolism-related diseases (e.g. obesity or diabetes), central nervous
 CC system disorders (e.g. Alzheimer's disease, Parkinson's disease,
 CC epilepsy, multiple sclerosis, schizophrenia or depression), autoimmune
 CC and inflammatory disorders (e.g. psoriasis, allergy, lupus erythematosus,
 CC asthma, inflammatory bowel disease, rheumatoid arthritis or
 CC osteoarthritis), cancers (e.g. colon, lung, liver, breast, ovarian,
 CC prostate or brain cancers, or melanoma), liver diseases (e.g. liver
 CC cirrhosis), lung diseases (emphysema or obstructive pulmonary disease),
 CC haemophilia, stroke, or infections (e.g. viral, bacterial or parasitic).
 CC These are also useful in developing powerful assay system for functional
 CC analysis of various human disorders, as well as in diagnostic
 CC applications, and for monitoring the effects of drugs during clinical
 CC trials. This sequence represents a primer used to isolate DNA encoding
 CC novel human NOV proteins
 XX
 XX Sequence 22 BP; 10 A; 7 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.8; DB 1; Length 22;
 Best Local Similarity 88.9%; Pred. No. 6.2e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1400 TGTTCACGTTTGAGGGTC 1417
 Db 19 TGTTCACGTTTGAGGGTC 2
 RESULT 457
 ABX72335
 ID ABX72335 standard; DNA; 22 BP.
 XX
 XX ABX72335;
 XX
 XX 03-JUN-2003 (first entry)
 DT
 DE Human NOVX DNA PCR primer #40.
 XX
 XX Human; NOVX; PCR; ss; metabolic disorder; cardiomyopathy; diabetes; ASD;
 KW hypertension; congenital heart defect; aortic stenosis; valve disease;
 KW atrial septal defect; atrioventricular canal defect; ductus arteriosus;
 KW pulmonary stenosis; subaortic stenosis; ventricular septal defect; VSD;
 KW tuberosus sclerosis; scleroderma; atherosclerosis; infectious disease;
 KW obesity; anorexia; neurodegenerative disorder; Alzheimer's disease;
 KW Parkinson's disease; immune disorder; haematopoietic disorder; primer;
 KW haemophilia; hypercoagulation; Crohn's disease; cancer.
 XX
 XX Homo sapiens.
 OS
 XX WO200281498-A2.
 XX
 XX 17-OCT-2002.
 PD
 XX
 XX 03-APR-2002; 2002WO-US010780.

KW transcription; translation; truncation; site-directed mutagenesis;
 KW prokaryote; open reading frame; primer; amplification; ss.

OS Synthetic.
 OS Homo sapiens.

XX US5863770-A.

XX 26-JAN-1999.

XX 21-FEB-1996; 96US-00604488.

XX 22-AUG-1989; 89US-00396894.

PR 24-AUG-1989; 89US-00399945.

PR 31-AUG-1989; 89US-00401609.

PR 21-SEP-1990; 90GB-00020632.

XX 12-APR-1993; 93US-00030081.

XX (HSCR-) HSC RES & DEV LP.

XX Tsui L, Rommens JM;

XX WPI; 1992-150482/18.

XX Modified DNA sequence - derived from gene coding for cystic fibrosis

XX Trans:membrane conductance regulator protein.

XX Disclosure; Fig 7; 36pp; English.

XX The invention relates to a recombinant human cystic fibrosis
 CC transmembrane conductance regulator (CFTR) gene used for the expression
 CC and production of the CFTR protein in bacteria. Production of the full
 CC length CFTR protein in bacterial systems has been hampered by a region in
 CC exon 6 which is homologous to the -35 and -10 boxes of prokaryotic
 CC transcription systems, and may lead to incorrect transcription and
 CC translation resulting in a truncated CFTR protein which may be toxic to
 CC bacteria. The method of the invention comprises site-directed mutagenesis
 CC of this region of exon 6 to remove homology with the prokaryotic
 CC transcriptional start signals without affecting the encoded amino acids
 CC of the reading frame. Primers AAX04445-X04448 were used for the site-
 CC directed mutagenesis of exon 6

SQ Sequence 21 BP; 7 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;

Best Local Similarity 81.0%; Pred. No. 6.4e+02;

Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1530 GGTACAAAGGAGGCGAGCCT 1550

Db 1 GGTACCAAGGAGGAGGCGAGCCT 21

RESULT 460

AAQ36678

ID AAQ36678 standard; cDNA; 21 BP.

AC AAQ36678;

XX 25-MAR-2003 (revised)

DT 09-JUN-1993 (first entry)

XX Potato PPO primer #4.

XX Polyphenol oxidase; PPO; catalyst; browning; fruit; plastid; vacuole;
 KW transform; coffee; tea; black olives; grapevine; chloroplast; apple;
 KW transit peptide; recombinant plasmid; PCR; primer; amplify; broad bean;
 KW potato; polymerase chain reaction; ss.

XX Synthetic.

XX WO9302195-A1.

XX

PD 04-FEB-1993.

XX 16-JUL-1992; 92WO-AU000356.

XX 17-JUL-1991; 91AU-00007248.

XX (CSIR) COMMONWEALTH SCI & IND RES ORG.

XX Robinson SP, Dry IB;

XX WPI; 1993-058792/07.

XX DNA encoding polyphenol oxidase polypeptide or fragment - useful for
 PT modifying the oxidase activity in fruit and vegetables to decrease or
 PT enhance browning.

XX Claim 20; Page 24; 44pp; English.

XX The sequences given in AAQ36670-78 are primers which were used in the
 CC isolation and cloning of the polyphenol oxidase (PPO) enzyme genes from
 CC various plants. The PPO genes were isolated, and recombinant plasmids for
 CC transformation of plant cells were produced by PCR using these primers.
 CC PPO is thought to be the predominant catalyst in browning of fruit caused
 CC by injury or damage. PPO is localised in the plastids of plant cells
 CC whereas the phenolic substrates of the enzyme are stored in the plant
 CC cell vacuole. This compartmentation prevents the browning reaction from
 CC occurring unless the plant cells are damaged and the enzyme and the
 CC substrate are mixed. The PPO gene sequences could be used to construct
 CC synthetic genes which may be used to transform plants to decrease
 CC expression of the enzyme gene. In some instances, eg. coffee, tea, black
 CC olives etc., it is desirable to increase the level of PPO to produce
 CC desired levels of browning or changes in flavour compounds. The grapevine
 CC PPO gene codes for an additional 103 amino acids upstream of the N-
 CC terminus of the mature protein. This region has the properties of a
 CC chloroplast transit peptide and is most likely responsible for targeting
 CC of the protein to be imported into the chloroplast and processed to
 CC produce mature PPO. Transformation of plants with this gene may therefore
 CC result in correct targeting and maturation of the grapevine PPO in other
 CC species and result in accumulation of active grapevine PPO enzyme in the
 CC plastids of these tissues. (Updated on 25-MAR-2003 to correct FN field.)

SQ Sequence 21 BP; 5 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;

Best Local Similarity 81.0%; Pred. No. 6.4e+02;

Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 998 TGCTCATCAACGAGGAGGAG 1018

Db 1 TGCTCATCAACTGGAGTTGAG 21

RESULT 461

AAQ61708/c

ID AAQ61708 standard; cDNA; 21 BP.

XX AAQ61708;

XX 25-MAR-2003 (revised)

DT 21-OCT-1994 (first entry)

XX HEV strain BUR-121 primer R193.

XX Hepatitis E virus; HEV; strain SAR-55; open reading frame; ORF; PCR;
 KW antibody; detection; diagnosis; primates; stool suspension; amplify;
 KW polymerase chain reaction; primer; burma; strain BUR-121; ss.

OS Synthetic.

XX WO9406913-A2.

XX 31-MAR-1994.

XX

PF 17-SEP-1993; 93WO-US008849.
XX
PR 18-SEP-1992; 92US-00947263.
XX
XX (USSH) US SEC DEPT HEALTH.
XX
XX Tsarev SA, Emerson SU, Purcell RH;
XX
DR WPI; 1994-118462/14.
XX
XX Purified hepatitis E strain SAR-55 virus - used to develop prods. for use
PT in detection, diagnosis, vaccines and therapy of hepatitis E virus
PT infection.
PT
XX Example 1; Page 38; 114pp; English.
PS
XX The sequences given in AAQ45198-200 and AAQ61687-777 are primers which
CC were used in the isolation and amplification of the genomic sequence of
CC the hepatitis E virus (HEV) strain SAR-55. These primers were based on
CC sequences derived from the SAR-55 strain and a strain from Burma (BUR-
CC 121). The amplified sequence contains three open reading frames (ORFs).
CC The proteins encoded by this sequence can be used to stimulate the
CC production of protective antibodies upon injection into a mammal that
CC would serve to protect the mammal upon challenge with wild type HEV. The
CC proteins can be used for detection and diagnosis of HEV infection. This
CC cDNA was isolated from primates inoculated with stool suspensions
CC obtained from hepatitis E patients. (Updated on 25-MAR-2003 to correct PN
CC field.)
XX
SQ Sequence 21 BP; 4 A; 5 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 814 CACACGAGAGTCCCTCACC 834
DB 21 CACACTGAGAGTGGTCATC 1

RESULT 462
AAQ95568
ID AAQ95568 standard; DNA; 21 BP.
XX
XX AAQ95568;
AC
DT 14-FEB-1996 (first entry)
XX
XX Primer B2 (Group 4, set A) for a human chromosomal marker.
XX
XX Primer: polymerase chain reaction; PCR; linkage study; locus;
KW microsatellite marker sequence; automated genotyping; allele;
KW polymorphism; detection; Homo sapiens; ss.
XX
XX Synthetic.
OS
XX WO9515400-A1.
PN
XX 08-JUN-1995.
PD
XX 05-DEC-1994; 94WO-US013945.
PF
XX 03-DEC-1993; 93US-00160837.
PR
XX (UJJO) UNIV JOHNS HOPKINS.
PA
XX Levitt RC;
PI
XX WPI; 1995-215278/28.
DR
XX Kit for automated genotyping contg. pairs of PCR primers - designed to
PT amplify polymorphic nucleotide repeat sequences, arranged in sets each
PT with a characteristic fluorescence label, useful e.g. in detection of

PT disease related genetic rearrangement.
XX
PS Disclosure; Fig 7D-3; 104pp; English.
XX
XX The method aims to provide a collection of highly reproducible
CC microsatellite marker sequences (MMS) at approx. 10-50 cm intervals
CC throughout the human genome which can be detectably labelled. The MMS are
CC polymorphic, simple sequence repeats and can be used in automated
CC genotyping. esp. fluorescence-based. The primers correspond to the unique
CC DNA sequence surrounding each marker, and PCR is used to detect each
CC polymorphism. When the MMS show considerable polymorphism (ie. a
CC difference in the number of repeats) between individuals, the markers can
CC be particularly informative. The MMS can be ideal for linkage studies.
CC Kits comprise at least 4 groups, of at least 3 sets, each comprising
CC labelled primers for PCR amplification of the DNA. Group 4 primer pairs
CC are shown in AAQ95465-480 and AAQ95559-590. The chromosomal markers,
CC published size range of the allele and degree of heterozygosity in the
CC population for the markers covered by these primer pairs are not given in
CC the specification
XX
SQ Sequence 21 BP; 9 A; 2 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 4 AAGCAGCGCTAAGGATGGACA 24
DB 1 AAGCATCTTAATGGATGGAAA 21

RESULT 463
AAT27419/c
ID AAT27419 standard; DNA; 21 BP.
XX
XX AAT27419;
AC
DT 27-NOV-1996 (first entry)
XX
XX HEV strain Burma-121 derived reverse primer 193 (ORF-1).
DE
XX Hepatitis E virus; HEV; SAR-55 strain; enteric transmission;
KW structural region; antigen; detection; antibody; vaccine; immunisation;
KW infection; Burma-121 strain; primer; polymerase chain reaction; ss.
XX
XX Synthetic.
OS
XX WO9610580-A2.
PN
XX 11-APR-1996.
PD
XX 03-OCT-1995; 95WO-US013102.
PF
XX 03-OCT-1994; 94US-00316765.
PR
XX (USSH) US DEPT HEALTH & HUMAN SERVICES.
PA
XX Tsarev SA, Emerson SU, Purcell RH;
PI
XX WPI; 1996-209320/21.
DR
XX Isolated and purified hepatitis E virus strain SAR-55 DNA - encodes
PT antigenic protein useful in diagnosis, prophylaxis and treatment of
PT hepatitis E virus infection.
PT
XX Example 1; Page 40; 121pp; English.
PS
XX The present sequence is a hepatitis E virus (HEV) strain Burma-121
CC derived primer, used in the isolation of the HEV strain SAR-55 cDNA. The
CC HEV strain SAR-55 was implicated in an enterically transmitted non-A, non
CC -B hepatitis in Pakistan. The protein encoded by the structural region of
CC the virus (ie. ORF-2), which is capable of forming HEV like particles,
CC is useful for the detection of HEV antibodies (pref. IgG or IgM) in

CC blood, plasma, sera, cerebrospinal fluid, tissue, urine or pleural fluid.
 CC The protein, and anti-HEV antibodies generated using the protein, can
 CC also be used in vaccines for immunising an animal against HEV infection.
 CC The protein is identified as a band of greater than 50 kD following SDS-
 CC PAGE of cell lysates of insect cells infected with a HEV ORF-2 contg.
 CC baculovirus, i.e. the claimed recombinant expression vectors pPIC9-1779,
 CC -1780 and -1781
 XX
 SQ Sequence 21 BP; 4 A; 5 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
 Best Local Similarity 81.0%; Pred. No. 6.4e+02;
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 814 CACACGAGAGTCCCTCACC 834
 |||||
 Db 21 CACACTGAGAGTGGTCAATC 1

RESULT 464
 AAV71629/c
 ID AAV71629 standard; DNA; 21 BP.

AC AAV71629;

XX
 DT 02-FEB-1999 (first entry)

XX HEV ORF proteins encoding DNA amplifying primer R 193 B.

XX Hepatitis E virus; HEV; SAR-55; diagnostic agent; vaccine; antibody;
 KW passive immunisation; open reading frame; ORF; PCR primer; ss.

XX Synthetic.

OS Hepatitis E virus.

XX WO9846761-A1.

XX 22-OCT-1998.

XX 09-APR-1998; 98WO-US007418.

XX 11-APR-1997; 97US-00840316.

XX (USSH) US DEPT HEALTH & HUMAN SERVICES.

XX Emerson SU, Purcell RH, Tearev SA, Robinson RA;

XX WPI; 1998-568733/48.

XX New Hepatitis E virus DNA from Pakistani strain SAR-55 - used for, e.g.
 PT developing products for diagnosis of, and vaccination against hepatitis E
 PT virus infection.

XX Example 1; Page 42; 204pp; English.

XX Sequences AAV71605 to AAV71698 represent primers used for PCR
 CC amplification of the hepatitis E virus (HEV) DNA SAR-55 encoding the open
 CC reading frame (ORF) proteins ORF-1, ORF-2 and ORF-3. A host organism
 CC transformed or transfected with a recombinant expression vector
 CC containing the SAR-55 nucleic acid can be used to produce the HEV
 CC proteins, especially ORF-2 protein. The recombinant HEV proteins can be
 CC used as diagnostic agents and as vaccines for use against HEV infection.
 CC The detection of antibodies specific for HEV can be used for the
 CC diagnosis of infection and diseases caused by HEV, and for monitoring the
 CC progression of such disease. Such methods are also useful for monitoring
 CC the efficacy of therapeutic agents during the course of treatment of HEV
 CC infection and disease in a mammal. The antibodies can be used for
 CC detection or for passive immunisation of mammals

XX Sequence 21 BP; 4 A; 5 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
 Best Local Similarity 81.0%; Pred. No. 6.4e+02;

Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 OY 814 CACACGAGAGTCCCTCACC 834
 |||||
 Db 21 CACACTGAGAGTGGTCAATC 1

RESULT 465

AAV38621/c
 ID AAV38621 standard; DNA; 21 BP.

XX AAV38621;

XX 13-OCT-1998 (first entry)

XX Human ICAM-1, E-selectin, VCAM-1 antisense oligonucleotide.

XX ICAM-1; intracellular adhesion molecule-; E-selectin; VCAM-1;
 KW vascular cell adhesion molecule-1; antisense; inflammatory disease;
 KW treatment; septic shock; psoriasis; wounds; acne; arthritis;
 KW organ rejection; inhibition; expression; ss.

XX Synthetic.

OS Homo sapiens.

XX WO9824797-A1.

XX 11-JUN-1998.

XX 02-DEC-1996; 96WO-US019194.

XX 02-DEC-1996; 96WO-US019194.

XX (DYAD-) DYAD PHARM CORP.

XX Hoke GD, Bradley MO, Williams TJ, Lee C;

XX WPI; 1998-333253/29.

XX Antisense oligonucleotides to ICAM-1, E-selectin or VCAM-1 - useful for
 PT treating diseases having an inflammatory component, e.g. psoriasis,
 PT wounds and septic shock.

XX Claim 8; Page 40; 48pp; English.

XX The sequence is that of an antisense oligonucleotide which is
 CC substantially complementary to at least a portion of the pre- or mature
 CC RNA transcript of human intracellular adhesion molecule (ICAM), E-
 CC selectin or vascular cell adhesion molecule (VCAM). It can be used to
 CC inhibit expression of these proteins. Inhibition of these proteins forms
 CC the basis for treatment of conditions and diseases that have an
 CC inflammatory component, e.g. acne, psoriasis, arthritis, organ rejection,
 CC wounds, burns, septic shock or inflammatory complications of septic shock

XX Sequence 21 BP; 3 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
 Best Local Similarity 81.0%; Pred. No. 6.4e+02;
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 225 TCAGAGTGGTGGTGGCGG 245

Db 21 TCAGAGGGGAGTGGTGGGG 1

RESULT 466

AAZ26779
 ID AAZ26779 standard; DNA; 21 BP.

XX AAZ26779;

XX 30-NOV-1999 (first entry)

DE Human polymorphic region 968.
 XX Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;
 KW cell viability; loss of heterozygosity; precancerous condition; ASI;
 KW allele specific inhibitor; somatic cell; diagnosis; prevention;
 KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;
 KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;
 KW graft versus host disease; malignant cell removal; bone marrow; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO9841648-A2.
 XX
 XX 24-SEP-1998.
 XX
 XX 19-MAR-1998; 98WO-US005419.
 XX
 XX 20-MAR-1997; 97US-0041057P.
 XX
 XX (VARI-) VARIAGENICS INC.
 XX
 XX Housman D, Ledley PD, Stanton VP;
 XX
 XX WPI; 1998-521232/44.
 XX
 XX Identifying target genes for allele-specific drugs - used for diagnosis,
 PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,
 PT dysplastic lesions, endometriosis or graft versus host disease.
 XX
 XX Disclosure; Fig 7; 605pp; English.
 XX
 XX This invention describes a novel method for identifying an inhibitor
 CC potentially useful for treatment of cancer, where the inhibitor is active
 CC on a gene vital for cell growth or viability, and where the gene is
 CC subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
 CC used for preventing the development of cancer in a patient having a
 CC precancerous condition, by administering to the patient a first allele
 CC specific inhibitor (ASI) targeted to an allele of a first essential gene
 CC present in cells of the precancerous condition, where the normal somatic
 CC cells of the patient are heterozygous for the first gene, the inhibitor
 CC is active on at least one but less than all allelic forms of the gene
 CC present in a population and targets only one allelic form present in the
 CC normal somatic cells, and the first gene. The products and methods can be
 CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.
 CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic
 CC lesions, benign tumours, endometriosis, polycystic kidney disease, and
 CC graft versus host disease. The method can also be used to remove
 CC malignant cells from bone marrow transplants. AAZ25812-226925 represent
 CC human polymorphic sites described in the method of the invention
 XX
 XX Sequence 21 BP; 9 A; 5 C; 7 G; 0 T; 0 U; 0 Other;
 XX
 Query Match 0.8%; Score 14.6; DB 1; Length 21;
 Best Local Similarity 81.0%; Pred. No. 6.4e+02;
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1613 AAGCCACAGACGAGGCCCA 1633
 DB 1 AAGACACAGAGAGGCCCA 21
 RESULT 467
 AAX79667/c
 ID AAX79667 standard; DNA; 21 BP.
 XX
 XX AAX79667;
 XX
 XX 12-AUG-1999 (first entry)
 XX
 XX Human LKB1 gene primer/probe.
 XX
 XX LKB1 gene; human; serine protease; Peutz-Jeghers syndrome; PJ syndrome;
 KW variation detection; therapy; diagnosis; primer; probe; ss.

XX Synthetic.
 OS Homo sapiens.
 OS
 XX WO9928459-A1.
 XX
 XX 10-JUN-1999.
 XX
 XX 27-NOV-1998; 98WO-JP005357.
 XX
 XX 27-NOV-1997; 97JP-00344256.
 PR 01-OCT-1998; 98JP-00280357.
 XX
 XX (CHUG-) CHUGAI RES INST MOLECULAR MEDICINE INC.
 XX
 XX Jenne DE, Nezu J;
 XX WPI; 1999-358129/30.
 XX
 XX Primers and probes for use in diagnosis of Peutz-Jeghers syndrome.
 FT
 XX Claim 2; Page 95; 107pp; Japanese.
 XX
 XX This sequence represents a primer/probe sequence of the invention. The
 CC primer and probe sequences are derived from the sequence of the human
 CC serine protease gene LKB1, and are used to detect variations in LKB1
 CC leading to Peutz-Jeghers (PJ) syndrome. The primers and probes can be
 CC used for the diagnosis, investigation and treatment of diseases in which
 CC variations in the LKB1 gene are implicated, such as PJ syndrome
 XX
 XX Sequence 21 BP; 3 A; 2 C; 10 G; 6 T; 0 U; 0 Other;
 XX
 Query Match 0.8%; Score 14.6; DB 1; Length 21;
 Best Local Similarity 81.0%; Pred. No. 6.4e+02;
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 814 CACACGAGAGAGTCCCTCACC 834
 DB 21 CACACGAGAGTCCCTCACC 1
 RESULT 468
 AAX09079/c
 ID AAX09079 standard; DNA; 21 BP.
 XX
 XX AAX09079;
 XX
 XX 14-JUN-1999 (first entry)
 XX
 XX Tumour necrosis factor alpha antisense oligonucleotide.
 XX
 XX Tumour necrosis factor alpha; TNF-alpha; antisense oligonucleotide; ASO;
 KW inhibition; expression; treatment; disease; disorder; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 OS
 XX WO9901139-A1.
 XX
 XX 14-JAN-1999.
 XX
 XX 02-JUL-1998; 98WO-US013711.
 XX
 XX 03-JUL-1997; 97US-0051705P.
 XX
 XX (UYJE-) UNIV JEFFERSON THOMAS.
 XX
 XX Tu G, Israel Y;
 XX WPI; 1999-105767/09.
 XX
 XX Generation of antisense oligonucleotides - by specifically targeting a
 PT GCGA motif found in mRNA sequences.
 PT

XX Example 2; Page 37; 55pp; English.

XX Antisense oligonucleotides (ASO) for inhibiting a tumour necrosis factor-

XX alpha (TNF-alpha) gene in an animal, preferably a human, comprise 12-50

XX nucleotides, 90% of which are complementary to a region of mRNA

XX containing a GGGA sequence motif. The ASO is used to inhibit expression

XX of a gene in an animal and for treating the animal when afflicted with a

XX disease or disorder characterised by the presence of an mRNA from a gene

XX containing a GGGA motif. The ASO are specifically targeted to a GGGA

XX sequence motif found in mRNA from a gene. A study of known ASO has shown

XX that at least half of the most efficacious ASO's contain one or more TCCC

XX motifs. This ASO comprises a TCCC motif followed by a cytosine residue

XX and corresponds to a region of the human ICAM-1 3' untranslated region

XX

XX Sequence 21 BP; 3 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

XX

Query Match 0.8%; Score 14.6; DB 1; Length 21;

Best Local Similarity 81.0%; Pred. No. 6.4e+02;

Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 225 TGAGAGTGTGGTGGTGGCGG 245

Db 21 TGAGAGGGGAAGTGGTGGGG 1

RESULT 469

AAZ57835

ID AAZ57835 standard; DNA; 21 BP.

AC AAZ57835;

XX 11-APR-2000 (first entry)

XX HSV-2 ICP6 gene probe used in TagMan analysis.

XX

XX Fine array transcript mapping; FAT mapping; FATmap; HSV-2;

XX differential expression; ICP6 gene; probe; ss.

XX

XX Herpes simplex virus 2.

XX

XX WO9967422-A1.

XX

XX 29-DEC-1999.

XX

XX 18-JUN-1999; 99WO-US013813.

XX

XX 24-JUN-1998; 98US-0090464P.

XX

XX (SMIK) SMITHKLINE BEECHAM CORP.

XX

XX Leary JJ, Tal-Singer R;

XX

XX WPI; 2000-147217/13.

XX

XX Novel analytical method designated Fine Array Transcript Mapping, useful

XX for detecting and measuring RNA molecules transcribed from a genome,

XX differential expression, and sequence mapping.

XX

XX Example 1; Page 17; 53pp; English.

XX

XX This sequence represents a probe targeted at the ICP6 gene of herpes

XX simplex virus type 2 (HSV-2) SB5 (ATCC VR 2546). It was used as a TagMan

XX probe in quantitative analysis of the HSV-2 genome. The invention provides

XX a novel genetic analysis method termed Fine Array Transcript Mapping (FAT

XX Mapping) for detecting and measuring RNA molecules transcribed from a

XX genome, differential expression, and mapping of the 5' sequence of a

XX transcript. FAT mapping involves probing a test grid containing an array

XX of 100s to 1000s of overlapping genomic clones or DNA fragments with

XX probes consisting of labeled cDNAs representing the RNA transcripts from

XX test populations. The system allows quantitative measurements of the

XX expression of rare transcripts, and enables the analysis of 100s of genes

XX within a genomic sequence in a single run. The method can be used to

CC measure the differential expression of transcripts between 2 or more

CC different viral, tissue or cell populations which share a common genomic

CC sequence, or to determine whether a particular open reading frame is

CC expressed under certain conditions. The FATMap technique has been applied

CC to the HSV-2 genome

XX

XX Sequence 21 BP; 4 A; 10 C; 4 G; 3 T; 0 U; 0 Other;

XX

Query Match 0.8%; Score 14.6; DB 1; Length 21;

Best Local Similarity 81.0%; Pred. No. 6.4e+02;

Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 550 AAGCCCTCAGCGCGGCTC 570

Db 1 AAGCGCTGATCGGCACCTC 21

RESULT 470

AAZ75780

ID AAZ75780 standard; DNA; 21 BP.

XX AAZ75780;

XX 10-SEP-2001 (first entry)

XX Human biallelic marker downstream amplification primer SEQ ID NO:10136.

XX

XX Human genome; biallelic marker; high density disequilibrium map;

XX genomic map; haplotype; phenotype; polymorphic base; genotyping;

XX haplotyping; hybridisation; identification; characterisation;

XX amplification; single nucleotide polymorphism; SNP; PCR primer;

XX diagnosis; ss.

XX

XX Homo sapiens.

XX

XX WO9954500-A2.

XX

XX 28-OCT-1999.

XX

XX 21-APR-1999; 99WO-IB000822.

XX

XX 21-APR-1998; 98US-0082614P.

XX

XX 23-NOV-1998; 98US-0109732P.

XX

XX (GEST) GENSET.

XX

XX Cohen D, Blumenfeld M, Chumakov I;

XX

XX WPI; 2000-013267/01.

XX

XX Novel biallelic markers used to construct a high density disequilibrium

XX map of the human genome.

XX

XX Claim 9; Page 2391; 2745pp; English.

XX

XX AA265654 to AA269578 represent human biallelic markers from the present

XX invention, which contain a polymorphic base at position 24 of their

XX nucleotide sequences. AA269579 to AA277440 represent amplification

XX primers for the biallelic markers. The biallelic markers of the invention

XX have a variety of uses: they can be used for high density mapping of the

XX human genome, and in complex association studies and haplotyping studies

XX which are useful in determining the genetic basis for disease states.

XX Compositions and methods of the invention can also be useful for the

XX identification of the targets for the development of pharmaceutical

XX agents and diagnostic methods, as well as the characterisation of the

XX differential efficacious responses to and side effects from

XX pharmaceutical agents acting on a disease as well as other treatment.

XX N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and

XX 3367, are not actually given a sequence in the sequence listing from the

XX present invention

XX

XX Sequence 21 BP; 8 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1060 ATCCCAACAAAGACATACTCC 1080
Db 1 ATCCCTACAGAGATAATCC 21

RESULT 471
AAZ73450/c
ID AAZ73450 standard; DNA; 21 BP.
XX AC AAZ73450;
XX DT 10-SEP-2001 (first entry)
XX DE Human biallelic marker upstream amplification primer SEQ ID NO:7806.
XX KW Human genome; biallelic marker; high density disequilibrium map;
XX KW Genomic map; haplotype; phenotype; polymorphic base; genotyping;
XX KW Haplotyping; hybridisation; identification; characterisation;
XX KW Amplification; single nucleotide polymorphism; SNP; PCR primer;
XX KW diagnosis; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX PN WO954500-A2.
XX PD 28-OCT-1999.
XX PF 21-APR-1999; 99WO-IB000822.
XX XX
XX PR 21-APR-1998; 98US-0082614P.
XX PR 23-NOV-1998; 98US-0109732P.
XX (GEST) GENSET.
XX PA Cohen D, Blumenfeld M, Chumakov I;
XX PI WPI; 2000-013267/01.
XX DR Novel biallelic markers used to construct a high density disequilibrium
XX PT map of the human genome.
XX PS Claim 9; Page 1895; 2745pp; English.
XX CC AAZ65654 to AAZ69578 represent human biallelic markers from the present
XX CC invention, which contain a polymorphic base at position 24 of their
XX CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
XX CC primers for the biallelic markers. The biallelic markers of the invention
XX CC have a variety of uses: they can be used for high density mapping of the
XX CC human genome, and in complex association studies and haplotyping studies
XX CC which are useful in determining the genetic basis for disease states.
XX CC Compositions and methods of the invention can also be useful for the
XX CC identification of the targets for the development of pharmaceutical
XX CC agents and diagnostic methods, as well as the characterisation of the
XX CC differential efficacious responses to and side effects from
XX CC pharmaceutical agents acting on a disease as well as other treatment.
XX CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
XX CC 3367, are not actually given a sequence in the Sequence Listing from the
XX CC present invention
XX SQ Sequence 21 BP; 2 A; 1 C; 9 G; 9 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 429 CAACCATCCCGGACGCAAGAT 449
Db 21 CAACCAACCAACACTCAAGAT 1

RESULT 472
AAC80113/c
ID AAC80113 standard; DNA; 21 BP.
XX AC AAC80113;
XX DT 03-MAY-2001 (first entry)
XX DE Reverse primer #25 used for amplification of HLA-A exon 2.
XX KW HLA-A; HLA-B; HLA-C; typing; primer; human; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX PN WO200061795-A2.
XX PD 19-OCT-2000.
XX PF 05-APR-2000; 200WO-EP002998.
XX XX
XX PR 09-APR-1999; 99EP-00870068.
XX PR 11-JUN-1999; 99US-0138614P.
XX (INNO-) INNOGENETICS NV.
XX PI De Canck I, Rombout A, Rossau R;
XX WPI; 2000-647426/62.
XX Locus-specific, separate amplification of exon 2, exon 3, and/or exon 4
XX of human leukocyte antigen (HLA) -A, HLA-B, or HLA-C alleles using defined
XX primer sets, useful for subtyping or typing of HLA Class I alleles.
XX Claim 4; Page 35; 128pp; English.
XX The present invention relates to a method for the locus-specific,
XX separate amplification of exon 2, exon 3, and/or exon 4 of human
XX leukocyte antigen (HLA) -A, HLA-B, or HLA-C alleles. The method is useful
XX for subtyping or typing of HLA class I alleles. The present sequence is
XX an amplification primer used in the method
XX SQ Sequence 21 BP; 1 A; 9 C; 7 G; 3 T; 0 U; 1 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 6.4e+02;
Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 249 TGACCTCGAGAGGCC 265
Db 21 TGHCCCGGAGAGGCC 5

RESULT 473
AAC92275/c
ID AAC92275 standard; DNA; 21 BP.
XX AC AAC92275;
XX DT 22-MAR-2001 (first entry)
XX DE Mouse LKB1 PCR primer SEQ ID NO:7.
XX KW Mouse; LKB1; gene knockout animal; LKB1 gene disruption; cancer;
XX KW Peutz-Jeghers syndrome; serine/threonine kinase; STK11; tumour;
XX KW PCR primer; ss.
XX OS Mus musculus.
XX PN WO200072670-A1.
XX PD 07-DEC-2000.

XX 31-MAY-2000; 2000WO-JP003504.
XX 31-MAY-1999; 99JP-00153030.
XX (CHUG-) CHUGAI RES INST MOLECULAR MEDICINE INC.
XX (CHUS) CHUGAI SEIVAKU KK.
XX Nezu J, Ose A, Jishage K, Jenne DE;
XX WPI; 2001-061412/07.

XX Knockout mammal for LKB1 (STK11) gene for the investigation of and
XX development of treatments for cancer and Peutz-Jeghers syndrome.

XX Example 1; Page 13; 75pp; Japanese.

XX The present invention describes a knockout mammal for the serine/
XX threonine kinase gene LKB1 (also known as STK11), in which all or part of
XX the gene or its expression regulating region is deleted. Also described
XX are: (1) cells which have the potential to differentiate, from the
XX knockout mammal, in which expression of the intrinsic LKB1 gene is
XX suppressed; and (2) producing the animal in which these cells are
XX inserted into an isolated embryo of the mammal, which is then implanted
XX into a false-pregnancy host female and brought to term. The knockout
XX mammal can be used in the investigation of the onset mechanism of
XX diseases in which LKB1 defects are implicated, including many tumours and
XX Peutz-Jeghers syndrome. It can also be used in the development of
XX remedies and treatment methods for these diseases, including the
XX screening of substances for their use in treatment and prevention. The
XX knockout mice may have LKB1 suppression which is time or tissue specific.
XX The present sequence represents a PCR primer used in the amplification of
XX mouse LKB1, which is used in an example from the present invention

XX Sequence 21 BP; 3 A; 2 C; 10 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 814 CACACGGAGAGTCCCTCACC 834
Db 21 CACACGGAGTACTCCATCACC 1

RESULT 474
AAF96555
ID AAF96555 standard; DNA; 21 BP.

AC AAF96555;

XX 06-JUN-2001 (first entry)

XX Human gene single nucleotide polymorphism #1316.

XX Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
XX polymorphism; vascular disease; coronary artery disease; forensics;
XX myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
XX pulmonary embolism; paternity test; ds.

OS Homo sapiens.

XX Key Location/Qualifiers
FH Variation replace(11,G)
FT /*tag= a
FT /standard_name= "single nucleotide polymorphism"

XX WO200118250-A2.

XX 15-MAR-2001.

XX 07-SEP-2000; 2000WO-US024503.

PR 10-SEP-1999; 99US-0153357P.
PR 26-JUL-2000; 2000US-0220947P.
PR 16-AUG-2000; 2000US-0225724P.
XX (WHED) WHITEHEAD INST BIOMEDICAL RES.
XX (MILL-) MILLENNIUM PHARM INC.
XX Lander ES, Gargill M, Ireland JS, Bolik S, Daley GO, McCarthy JJ;
XX WPI; 2001-226749/23.

XX Nucleic acids comprising single nucleotide polymorphisms, useful in
XX applications such as forensics, paternity testing, medicine, genetic
XX analysis and phenotype correlations to diseases such as diabetes and
XX atherosclerosis.

XX Example; Page 139; 242pp; English.

XX The present invention provides a method of diagnosing a vascular disease
XX in an individual, involving determining the sequence at various
XX polymorphic sites within the human thrombospondin 1 and thrombospondin 4
XX genes. The sequences at a number of polymorphic sites are also provided
XX in the specification. In particular, the method can be used in the
XX diagnosis of atherosclerosis, myocardial infarction, coronary heart
XX disease, stroke, peripheral vascular diseases, venous thromboembolism and
XX pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
XX useful in forensics, paternity testing, genetic analysis and phenotype
XX correlations to diseases. The present sequence is an example of one of
XX the human gene SNPs shown in the specification

XX Sequence 21 BP; 3 A; 7 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 494 TCCGGCTGCTGAGGCTACC 514
Db 1 TCGTGTGCTGATGACTACC 21

RESULT 475
AAF96059

ID AAF96059 standard; DNA; 21 BP.

AC AAF96059;

XX 06-JUN-2001 (first entry)

XX Human gene single nucleotide polymorphism #820.

XX Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
XX polymorphism; vascular disease; coronary artery disease; forensics;
XX myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
XX pulmonary embolism; paternity test; ds.

OS Homo sapiens.

XX Key Location/Qualifiers
FH Variation replace(11,C)
FT /*tag= a
FT /standard_name= "single nucleotide polymorphism"

XX WO200118250-A2.

XX 15-MAR-2001.

XX 07-SEP-2000; 2000WO-US024503.

XX 10-SEP-1999; 99US-0153357P.

XX 26-JUL-2000; 2000US-0220947P.

XX 16-AUG-2000; 2000US-0225724P.


```
PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.
PA (MILL-) MILLENNIUM PHARM INC.
XX
XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JJ;
XX WPI; 2001-226749/23.
XX
XX Nucleic acids comprising single nucleotide polymorphisms, useful in
XX applications such as forensics, paternity testing, medicine, genetic
XX analysis and phenotype correlations to diseases such as diabetes and
XX atherosclerosis.
XX
XX Example; Page 105; 242pp; English.
XX
XX The present invention provides a method of diagnosing a vascular disease
XX in an individual, involving determining the sequence at various
XX polymorphic sites within the human thrombospondin 1 and thrombospondin 4
XX genes. The sequences at a number of polymorphic sites are also provided
XX in the specification. In particular, the method can be used in the
XX diagnosis of atherosclerosis, myocardial infarction, coronary heart
XX disease, stroke, peripheral vascular diseases, venous thromboembolism and
XX pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
XX useful in forensics, paternity testing, genetic analysis and phenotype
XX correlations to diseases. The present sequence is an example of one of
XX the human gene SNPs shown in the specification
XX
XX Sequence 21 BP; 2 A; 6 C; 6 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1028 TGGCTGACITTTGGCTGGCC 1048
Db 1 TGGCTGACITTTGATGGCCC 21

RESULT 476
AAF96318
ID AAF96318 standard; DNA; 21 BP.
XX
XX AAF96318;
XX
XX 06-JUN-2001 (first entry)
XX
XX Human gene single nucleotide polymorphism #1079.
XX
XX Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
XX polymorphism; vascular disease; coronary artery disease; forensics;
XX myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
XX pulmonary embolism; paternity test; ds.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX Variation replace(11,T)
XX /*tag= a
XX /standard_name= "single nucleotide polymorphism"
XX
XX WO200118250-A2.
XX
XX 15-MAR-2001.
XX
XX 07-SEP-2000; 2000WO-US024503.
XX
XX 10-SEP-1999; 99US-0153357P.
XX 26-JUL-2000; 2000US-0220947P.
XX 16-AUG-2000; 2000US-0225724P.
XX
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX (MILL-) MILLENNIUM PHARM INC.
XX
XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JJ;
```

```
XX WPI; 2001-226749/23.
XX
XX Nucleic acids comprising single nucleotide polymorphisms, useful in
XX applications such as forensics, paternity testing, medicine, genetic
XX analysis and phenotype correlations to diseases such as diabetes and
XX atherosclerosis.
XX
XX Example; Page 126; 242pp; English.
XX
XX The present invention provides a method of diagnosing a vascular disease
XX in an individual, involving determining the sequence at various
XX polymorphic sites within the human thrombospondin 1 and thrombospondin 4
XX genes. The sequences at a number of polymorphic sites are also provided
XX in the specification. In particular, the method can be used in the
XX diagnosis of atherosclerosis, myocardial infarction, coronary heart
XX disease, stroke, peripheral vascular diseases, venous thromboembolism and
XX pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
XX useful in forensics, paternity testing, genetic analysis and phenotype
XX correlations to diseases. The present sequence is an example of one of
XX the human gene SNPs shown in the specification
XX
XX Sequence 21 BP; 5 A; 9 C; 7 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1379 GGGCGGACCTCTCCACCAAGC 1399
Db 1 GGGCGGAGCCCGACCAACGAC 21

RESULT 477
AAF97060/C
ID AAF97060 standard; DNA; 21 BP.
XX
XX AAF97060;
XX
XX 06-JUN-2001 (first entry)
XX
XX Human gene single nucleotide polymorphism #1821.
XX
XX Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
XX polymorphism; vascular disease; coronary artery disease; forensics;
XX myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
XX pulmonary embolism; paternity test; ds.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX Variation replace(11,A)
XX /*tag= a
XX /standard_name= "single nucleotide polymorphism"
XX
XX WO200118250-A2.
XX
XX 15-MAR-2001.
XX
XX 07-SEP-2000; 2000WO-US024503.
XX
XX 10-SEP-1999; 99US-0153357P.
XX 26-JUL-2000; 2000US-0220947P.
XX 16-AUG-2000; 2000US-0225724P.
XX
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX (MILL-) MILLENNIUM PHARM INC.
XX
XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JJ;
XX WPI; 2001-226749/23.
XX
XX Nucleic acids comprising single nucleotide polymorphisms, useful in
```

PT applications such as forensics, paternity testing, medicine, genetic
PT analysis and phenotype correlations to diseases such as diabetes and
PT atherosclerosis.
XX
XX Example; Page 169; 242pp; English.
XX
CC The present invention provides a method of diagnosing a vascular disease
CC in an individual, involving determining the sequence at various
CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4
CC genes. The sequences at a number of polymorphic sites are also provided
CC in the specification. In particular, the method can be used in the
CC diagnosis of atherosclerosis, myocardial infarction, coronary heart
CC disease, stroke, peripheral vascular diseases, venous thromboembolism and
CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
CC useful in forensics, paternity testing, genetic analysis and phenotype
CC correlations to diseases. The present sequence is an example of one of
CC the human gene SNPs shown in the specification
XX
XX Sequence 21 BP; 7 A; 1 C; 7 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1683 CTACATCTCCCTGCTTACTC 1703
| | | | | | | | | | | | | | | | | | | | |
Dd 21 CCACATCTTCATGATTACTC 1
RESULT 478
AAF28957/C
ID AAF28957 standard; DNA; 21 BP.
XX
XX AAF28957;
AC
XX
DT 18-JUN-2002 (first entry)
XX
DE Equine GM-CSF gene 5' RACE primer JP730.
XX
KW Immunostimulatory; granulocyte-macrophage colony stimulating factor;
KW horse; reverse transcriptase PCR; colony formation; blood; cytotoxicity;
KW inflammation; vector; adjuvant; immunogen; vaccination; vaccine; ss;
KW equine herpes; tetanus; Borrelia burgdorferi; rabies; 5'RACE; primer.
XX
OS Equus sp.
XX
XX WO200077210-A1.
XX
XX 21-DEC-2000.
XX
XX 08-JUN-2000; 2000WO-FR001590.
XX
XX 10-JUN-1999; 99US-0138843P.
XX
XX (MERI-) MERIAL.
XX
XX Bublot M, Perez JM, Andreoni CMP;
XX
XX WPI; 2001-080689/09.
XX
XX Novel DNA encoding equine granulocyte-macrophage colony-stimulating
XX factor, useful as adjuvant for vaccines and as non-specific
XX immunostimulant.
XX
XX Example 2; Page 13; 34pp; French.
XX
CC The invention relates to the isolation of the sequence of the gene
CC encoding a horse granulocyte-macrophage colony stimulating factor (GM-CSF
CC ; AAF28953). The gene was isolated from horse lymphocytes by using a 5'
CC and 3' RACE (rapid amplification of cDNA ends) method followed by a
CC reverse transcriptase (RT) PCR method. The sequence shown here represents
CC the 5' RACE primer JP730 used to isolate the 5' end of the equine GM-CSF
CC gene. GM-CSF induces colony formation in various types of blood cells and

CC particularly induces cytotoxicity of macrophages; stimulates antibody-
CC dependent cytotoxicity, and causes recruitment of leucocytes to sites of
CC inflammation. Vectors containing the gene or the protein itself, are
CC useful as adjuvants in immunogenic or vaccinating compositions for
CC horses, e.g. for protection against equine herpes, tetanus, Borrelia
CC burgdorferi, rabies etc. Also as non-specific stimulators of the immune
CC system. In a specific example, plasmid pJP097, containing the sequence
CC for equine GM-CSF was used to transform CHO-K1 cells and the
CC transformants grown for 48 hours. The culture supernatant was then added
CC to culture medium being used to grow porcine bone marrow cells. After 14
CC days, the mean number of colonies per culture box was 12-15, compared
CC with none for cells grown in absence of GM-CSF. Equine GM-CSF allows a
CC reduction in the amount of immunogenic/vaccinating component required,
CC and may induce a response in animals that would otherwise be non-
CC responders
XX
XX Sequence 21 BP; 3 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 618 CATTAAAGCTGGACAAACTGGG 638
| | | | | | | | | | | | | | | | | | | | |
Dd 21 CCTGAAGCTGTACAAACAGGG 1
RESULT 479
AAH78643
ID AAH78643 standard; DNA; 21 BP.
XX
XX AAH78643;
AC
XX
DT 10-DEC-2001 (first entry)
XX
DE PCR primer for mechanically sensitive potassium channel gene fragment.
XX
KW Human; mechanically sensitive potassium channel; riluzole; TWICK;
KW polyunsaturated fatty acid; arachidonic acid; hTRAAX; chromosome 11q13;
KW neuronal excitation; muscle excitation; cardiac rhythm; anoxia;
KW hormone secretion; cardiac disease; vascular disease; ischemia;
KW nervous system disorder; endocrinal disease; muscle disease;
KW retinal disease; epilepsy; cardiac arrhythmia; neurodegeneration;
KW PCR primer; ss.
XX
OS Homo sapiens.
XX
XX WO200158670-A2.
XX
XX 20-SEP-2001.
XX
XX 14-MAR-2001; 2001WO-FR000758.
XX
XX 14-MAR-2000; 2000FR-00003264.
XX
XX (CNRS) CNRS CENT NAT RECH SCI.
XX
XX Lazdunski M, Lesage F, Maingret F;
XX
XX WPI; 2001-590037/66.
XX
XX New mechanically sensitive potassium channel, useful for treating
XX cardiovascular diseases and in drug screening, is activated by
XX polyunsaturated fatty acids.
XX
XX Disclosure; Page 15; 37pp; French.
XX
CC PCR primers AAH78642-43 were used to amplify a gene fragment of the human
CC mechanically sensitive potassium channel gene. The channel is activated
CC by polyunsaturated fatty acids (particularly arachidonic acid (AA)) and
CC by riluzole. the polypeptide is designated human TWICK-related AA-
CC activated potassium channel (hTRAAX). The hTRAAX gene is located on
CC chromosome 11q13. hTRAAX is involved in regulation of neuronal and muscle

CC excitation, cardiac rhythm and secretion of hormones. Cells that express
CC hTRAAC, designated to screen for modulators of hTRAAC activity. Such
CC modulators are potentially useful for prevention or treatment, in humans
CC and animals, of: cardiac and/or vascular disease; nervous system
CC disorders associated with ischemia and anoxia; endocrinal diseases
CC associated with anomalous hormone secretion or muscle diseases; and
CC retinal diseases. Typical examples are epilepsy, cardiac arrhythmia and
CC neurodegeneration
XX
SQ Sequence 21 BP; 3 A; 7 C; 9 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1273 GAGACGTGCCAGGATCCTG 1293
||| ||||| |||||
Db 1 GAGGCCCGCCAGGATCCTG 21
RESULT 480
AAH78640
ID AAH78640 standard; DNA; 21 BP.
AC AAH78640;
XX
XX
DT 10-DEC-2001 (first entry)
XX
DE PCR primer for mechanically sensitive potassium channel gene fragment.
XX
KW Human; mechanically sensitive potassium channel; riluzole; TWICK;
KW polyunsaturated fatty acid; arachidonic acid; hTRAAC; chromosome 11q13;
KW neuronal excitation; muscle excitation; cardiac rhythm; anoxia;
KW hormone secretion; cardiac disease; vascular disease; ischemia;
KW nervous system disorder; endocrinal disease; muscle disease;
KW retinal disease; epilepsy; cardiac arrhythmia; neurodegeneration;
KW PCR primer; ss.
XX
OS Homo sapiens.
XX
XX WO200168670-A2.
XX
XX 20-SEP-2001.
XX
XX 14-MAR-2001; 2001WO-FR000758.
XX
XX 14-MAR-2000; 2000FR-00003264.
XX
XX (CNRS) CNRS CENT NAT RECH SCI.
XX
XX Lazdunski M, Lesage F, Maingret F;
XX
XX WPI; 2001-590037/66.
XX
XX New mechanically sensitive potassium channel, useful for treating
XX cardiovascular diseases and in drug screening, is activated by
XX polyunsaturated fatty acids.
XX
XX Disclosure; Page 15; 37pp; French.
XX
XX PCR primers AAH78639-40 were used to amplify a gene fragment of the human
XX mechanically sensitive potassium channel gene. The channel is activated
XX by polyunsaturated fatty acids (particularly arachidonic acid (AA)) and
XX by riluzole. The polypeptide is designated human TWICK-related AA-
XX activated potassium channel (hTRAAC). The hTRAAC gene is located on
XX chromosome 11q13. hTRAAC is involved in regulation of neuronal and muscle
XX excitation, cardiac rhythm and secretion of hormones. Cells that express
XX hTRAAC, designated to screen for modulators of hTRAAC activity. Such
XX modulators are potentially useful for prevention or treatment, in humans
XX and animals, of: cardiac and/or vascular disease; nervous system
XX disorders associated with ischemia and anoxia; endocrinal diseases
XX associated with anomalous hormone secretion or muscle diseases; and
XX retinal diseases. Typical examples are epilepsy, cardiac arrhythmia and

CC neurodegeneration
XX
SQ Sequence 21 BP; 3 A; 7 C; 9 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1273 GAGACGTGCCAGGATCCTG 1293
||| ||||| |||||
Db 1 GAGGCCCGCCAGGATCCTG 21
RESULT 481
AAH40014
ID AAH40014 standard; DNA; 21 BP.
XX
AC AAH40014;
XX
XX
DT 14-AUG-2001 (first entry)
XX
DE SNP specific lower PCR primer SEQ ID 2810.
XX
KW Single nucleotide polymorphism; SNP; single nucleotide primer extension;
KW SNPE; genotyping; agammaglobulinemia; diabetes insipidus; cancer;
KW Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;
KW polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;
KW acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;
KW inflammation; forensic investigation; paternity analysis; PCR primer; ss.
XX
OS Homo sapiens.
XX
XX WO200129262-A2.
XX
XX 26-APR-2001.
XX
XX 13-OCT-2000; 2000WO-US028436.
XX
XX 15-OCT-1999; 99US-0160096P.
XX
XX (ORCH-) ORCHID BIOSCIENCES INC.
XX
XX Picoult-Newburg L, Pohl M;
XX
XX WPI; 2001-290930/30.
XX
XX New genotyping oligonucleotide, useful for detecting the presence,
XX absence or identity of single polynucleotide polymorphism in a nucleic
XX acid sample.
XX
XX Claim 1; Page 64; 83pp; English.
XX
XX Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide
XX primer extension (SNPE) primers, and the sequences of regions flanking
XX sites of single nucleotide polymorphisms SNPs. The present invention
XX includes kits for determining the presence or absence of a SNP, using the
XX oligonucleotides of the invention. The PCR primers are used to amplify a
XX SNP flanking sequence, the SNPE primer is used as a genotyping primer.
XX The oligonucleotides are useful for genotyping a nucleic acid sample by
XX performing a single-nucleotide primer extension reaction. The
XX oligonucleotides are useful for determining the presence, absence or
XX identity of a SNP and for genotyping nucleic acid samples, for e.g. to
XX assess by association analysis the genotype of an individual or group of
XX individuals, having a pathological phenotypic trait suspected of being
XX caused by one or more SNPs. Phenotypic traits include diseases e.g.
XX agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
XX dystrophy, familial hypercholesterolaemia, polycystic kidney disease,
XX osteogenesis imperfecta and acute intermittent porphyria. Phenotypic
XX traits also include symptoms of or susceptibility to multifactorial
XX disease of which a component is or may be genetic such as autoimmune
XX diseases, including rheumatoid arthritis, multiple sclerosis,
XX inflammation, cancer, nervous system diseases and infection by pathogenic
XX microorganism. The method is also useful in forensic investigations and

CC paternity analysis. The present sequence represents a PCR primer specific
CC for a human SNP containing DNA sequence

XX Sequence 21 BP; 5 A; 3 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 223 GATGACAGTGGTGGTGGTGGC 243
|||||
Db 1 GATGACAGAGGTGGTGGTGGC 21

RESULT 482
AAD08585/c
ID AAD08585 standard; DNA; 21 BP.

XX AAD08585;
AC
XX
DT 04-SEP-2001 (first entry)

XX Primer PHN33881, to identify proteins that interact with maize NPRI.
XX Maize; NPRI-interacting protein; disease resistance; sequence shuffling;
XX transgenic plant; signal transduction pathway; primer; ss.

XX Zea mays.
XX WO200146423-A2.
XX 28-JUN-2001.

XX 19-DEC-2000; 2000WO-US034524.
XX 21-DEC-1999; 99US-0171691P.

XX (PION-) PIONEER HI-BRED INT INC.
XX Crane EH;
XX WPI; 2001-408649/43.

XX Novel maize NPRI-interacting polynucleotide, useful for engineering
XX plants with improved disease resistance by increasing sensitivity or
XX capacity of signal transduction pathway and for sequence shuffling.

XX Example 1; Page 57; 69pp; English.

XX The invention relates to NPRI-interacting proteins and nucleic acids
XX encoding them. NPRI-interacting DNA is useful for modulating the level of
XX NPRI-interacting protein in plants such as maize, soybean etc. By
XX manipulating NPRI-interacting DNA in maize or in other plants, the plant
XX can be engineered to improve resistance to pathogens by increasing the
XX sensitivity or capacity of the signal transduction pathway. The plants
XX containing altered NPRI expression are useful as universal disease
XX susceptible plants. NPRI-interacting DNA is further useful for sequence
XX shuffling. They are also used as probes. The invention also provides
XX transgenic plants with increased disease resistance. The present sequence
XX is an internal primer used to identify proteins that interact with NPRI

XX Sequence 21 BP; 7 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 821 AGAGTCCCTCACCTTGCT 841
|||||
Db 21 AGAGTCCCTCTCCTTGCT 1

RESULT 483

ABR01357
ID ABR01357 standard; RNA; 21 BP.

XX ABR01357;
AC
XX

DT 03-JUL-2002 (first entry)
DE YMD oligonucleotide #17.
XX

XX Selenoprotein; HIV; Ebola virus; cancer; immune system disorder; ss.
XX Simian immunodeficiency virus.
XX US6303295-B1.

PN 16-OCT-2001.
XX
XX 12-JUL-1996; 96US-00679493.

XX 14-JUL-1995; 95US-0001203P.
PR 01-SEP-1995; 95US-0003112P.
XX

XX (UYGE-) UNIV GEORGIA RES FOUND INC.
XX Taylor EW, Nadimpalli RG, Ramanathan CS;
XX WPI; 2002-024734/03.

XX New selenoprotein for use in detecting certain viruses, e.g. human
XX immunodeficiency virus (HIV) or Ebola, cancer and immune system
XX disorders.

XX Disclosure; Col 69-70; 140pp; English.

XX The present invention relates to selenoproteins encoded in the genome of
XX a virus, where the coding sequence of the selenoprotein is genetically
XX engineered for expression in a nucleic acid construct. The invention also
XX discloses a method for identifying selenoprotein coding sequences, for
XX detecting certain viruses (e.g. HIV or Ebola), cancer and immune system
XX disorders. The present sequence was used to illustrate the invention

XX Sequence 21 BP; 7 A; 5 C; 4 G; 0 T; 5 U; 0 Other;
Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 61.9%; Pred. No. 6.4e+02;
Matches 13; Conservative 4; Mismatches 4; Indels 0; Gaps 0;

Qy 862 CTGACGACGACGACGACGAC 882
|||||
Db 1 CUGAUCACACACGACGAC 21

RESULT 484
ABR01358
ID ABR01358 standard; RNA; 21 BP.

XX ABR01358;
AC
XX

DT 03-JUL-2002 (first entry)
DE YMD oligonucleotide #18.
XX

XX Selenoprotein; HIV; Ebola virus; cancer; immune system disorder; ss.
XX Simian immunodeficiency virus.
XX US6303295-B1.

PN 16-OCT-2001.
XX
XX 12-JUL-1996; 96US-00679493.

XX 14-JUL-1995; 95US-0001203P.
PR

XX SQ Sequence 21 BP; 7 A; 5 C; 4 G; 0 T; 5 U; 0 Other;
Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 61.9%; Pred.No.6.4e+02;
Matches 13; Conservative 4; Mismatches 4; Indels 0; Gaps 0;

QY 862 CTGAAGCAGTACCTGGATGAC 882
|::||:::||:
Db 1 CGUACCAUAUGAUGCAC 21

RESULT 486
ABA01355
ID ABA01355 standard; RNA; 21 BP.
XX AC ABA01355;
XX DT 03-JUL-2002 (first entry)
XX YMD oligonucleotide #15.
DE DE
XX Selenoprotein; HIV; Ebola virus; cancer; immune system disorder; ss.
KW KW
XX Simian immunodeficiency virus.
OS OS
XX US6303295-B1.
PN PN
XX 16-OCT-2001.
PD PD
XX 12-JUL-1996; 96US-00679493.
PP PP
XX 14-JUL-1995; 95US-0001203P.
PR PR
XX 01-SEP-1995; 95US-0003112P.
PT PT
XX PA (UYGE-) UNIV GEORGIA RES FOUND INC.

XX Taylor EW, Nadimpalli RG, Ramanathan CS;
XX WPI; 2002-024734/03.
XX DR
XX New selenoprotein for use in detecting certain viruses, e.g. human
PT immunodeficiency virus (HIV) or Ebola, cancer and immune system
disorders.
PT PS
XX Disclosure; Col 69-70; 14Opp; English.
XX CC
XX The present invention relates to selenoproteins encoded in the genome of
CC a virus, where the coding sequence of the selenoprotein is genetically
CC engineered for expression in a nucleic acid construct. The invention also
CC discloses a method for identifying selenoprotein coding sequences, for
CC detecting certain viruses (e.g. HIV or Ebola), cancer and immune system
CC disorders. The present sequence was used to illustrate the invention
XX XX
SQ Sequence 21 BP; 7 A; 5 C; 4 G; 0 T; 5 U; 0 Other;

Query Watch 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 61.9%; Pred.No.6.4e+02;
Matches 13; Conservative 4; Mismatches 4; Indels 0; Gaps 0;

QY 862 CTGAAGCAGTACCTGGATGAC 882
|::||:::||:
Db 1 CGUACCAUAUGAUGCAC 21

RESULT 487
ABA01365
ID ABA01365 standard; RNA; 21 BP.
XX AC ABA01365;
XX DT 07-AUG-2003 (revised)
DT 03-JUL-2002 (first entry)

```
XX DE YMBD oligonucleotide #25.
XX KW Selenoprotein; HIV; Ebola virus; cancer; immune system disorder; ss.
XX OS Mouse mammary tumor virus.
XX PN US6303295-B1.
XX PD 16-OCT-2001.
XX PF 12-JUL-1996; 96US-00679493.
XX PR 14-JUL-1995; 95US-0001203P.
XX PR 01-SEP-1995; 95US-0003112P.
XX PA (UYGE-) UNIV GEORGIA RES FOUND INC.
XX PI Taylor EW, Nadimpalli RG, Ramanathan CS;
XX DR WPI; 2002-024734/03.
XX PT New selenoprotein for use in detecting certain viruses, e.g. human
XX PT immunodeficiency virus (HIV) or Ebola, cancer and immune system
XX PT disorders.
XX PS Disclosure; Col 69-70; 140pp; English.
XX CC The present invention relates to selenoproteins encoded in the genome of
XX CC a virus, where the coding sequence of the selenoprotein is genetically
XX CC engineered for expression in a nucleic acid construct. The invention also
XX CC discloses a method for identifying selenoprotein coding sequences, for
XX CC detecting certain viruses (e.g. HIV or Ebola), cancer and immune system
XX CC disorders. The present sequence was used to illustrate the invention.
XX CC (Updated on 07-AUG-2003 to correct OS field.)
XX SQ Sequence 21 BP; 5 A; 5 C; 6 G; 0 T; 5 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.6; DB 1; Length 21;
XX Best Local Similarity 61.9%; Pred. No. 6.4e+02;
XX Matches 13; Conservative 4; Mismatches 4; Indels 0; Gaps 0;
XX
QY 862 CTGAAGCAGTACCTGGATGAC 882
Db 1 CUGCUACAGUACGUGGAUGAC 21
XX
RESULT 488
AAD30438
ID AAD30438 standard; DNA; 21 BP.
XX AC AAD30438;
XX DT 21-MAY-2002 (first entry)
XX DE Human androgen receptor (AR) polyglycine tract encoding DNA.
XX KW Human; AIB1; amplified in breast cancer 1; androgen receptor; AR;
XX KW prostate cancer; polyglycine; ds.
XX OS Homo sapiens.
XX PN WO200210452-A2.
XX PD 07-FEB-2002.
XX PF 27-JUL-2001; 2001WO-US023834.
XX PR 27-JUL-2000; 2000US-0221074P.
XX PA (UYRP ) UNIV ROCHESTER.
XX PI Chang C;
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XX WPI; 2002-206195/26.
XX PT Assessing the risk of acquiring or developing prostate cancer in a human
XX PT subject comprises determining the length of the contiguous CAG, CAA
XX PT and/or GGN repeats in the AIB1 gene and/or androgen receptor gene of the
XX PT subject.
XX PS Example 2; Page 45; 86pp; English.
XX CC The invention relates to a method for assessing the risk of prostate
XX CC cancer in a human subject. The method involves determining the length of
XX CC the contiguous CAG or CAA repeats in both AIB1 (Amplified In Breast
XX CC cancer 1) gene alleles or contiguous CAG, CAA or GGN repeats in the
XX CC androgen receptor gene of the subject. The method is useful for assessing
XX CC a subject's risk for acquiring or developing prostate cancer. The present
XX CC sequence is a DNA encoding human androgen receptor (AR) polyglycine
XX CC tract. This sequence is used in the molecular analysis and assessment of
XX CC the CAG and GGN repeat of AR gene
XX SQ Sequence 21 BP; 0 A; 1 C; 15 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.6; DB 1; Length 21;
XX Best Local Similarity 81.0%; Pred. No. 6.4e+02;
XX Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
QY 232 GGTGGTGGTGGCGGCAGTGAC 252
Db 1 GGTGGTGGTGGCGGTGGTGGC 21
XX
RESULT 489
ABK53794/C
ID ABK53794 standard; DNA; 21 BP.
XX AC ABK53794;
XX DT 05-JUN-2002 (first entry)
XX DE DMS:acceptor oxidoreductase, PCR primer #40.
XX KW DMS:acceptor oxidoreductase; dimethyl sulphide; sulphoxide;
XX KW prochiral organic sulphide; sulphoxide enantiomer; primer;
XX KW chiral drug production; optically-active functional drug; ss.
XX OS Rhodovulum sulfidophilum.
XX PN WO200216570-A1.
XX PD 28-FEB-2002.
XX PF 21-AUG-2001; 2001WO-AU001033.
XX PR 21-AUG-2000; 2000AU-00009559.
XX PA (UYQU ) UNIV QUEBENSLAND.
XX PI Mcdevitt CA, Mcewan AG;
XX DR WPI; 2002-280922/32.
XX PT New recombinant dimethyl sulfide:acceptor oxidoreductase or its subunits,
XX PT useful for oxidizing prochiral organic sulfides to form sulfoxide
XX PT enantiomers for chiral drug synthesis.
XX PS Claim 15; Page 46; 66pp; English.
XX CC The invention relates to a recombinant dimethyl sulphide (DMS):acceptor
XX CC oxidoreductase (I) or its subunit selected from recombinant alpha, beta,
XX CC delta and gamma subunits. (I) is useful for oxidising prochiral organic
XX CC sulphides to form sulphoxide enantiomers for chiral drug synthesis. (I)
XX CC is expressed in a transformed bacterium. The enantiomer formed is useful
XX CC for producing a chiral drug. (I) is useful for synthesis of optically-
```

CC active functional groups of drug. DNA encoding (I) is useful for
CC producing a strain of DMS:acceptor oxidoreductase- deficient Rhodovulum
CC sulfidophilum, which is useful in whole-cell reaction, where DMS:acceptor
CC oxidoreductase activity is unwanted. ABK53751-ABK53805 represent R.
CC sulfidophilum DMS:acceptor oxidoreductase subunit coding sequences and
CC PCR primers of the invention

XX SQ Sequence 21 BP; 3 A; 11 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;

Best Local Similarity 81.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 346 AAGATGGGCTCTGATGGGAG 366

DB 21 ATGATGGGACGGATGGCGAG 1

RESULT 490

ABQ74754/c
ID ABQ74754 standard; DNA; 21 BP.

XX AC ABQ74754;

XX DT 24-OCT-2002 (first entry)

XX DE Human TNFR2 forward PCR primer SEQ ID NO:4.

XX KW Tumour necrosis factor receptor 2; TNFR2; antisense oligonucleotide;
XX KW PCR primer; ss.

XX OS Homo sapiens.

XX PN US6410324-B1.

XX PD 25-JUN-2002.

XX PF 27-APR-2001; 2001US-00844634.

XX PR 27-APR-2001; 2001US-00844634.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Bennett CF, Watt AT;

XX PS WPI; 2002-606814/65.

XX PT New compounds antisense to nucleic acid encoding human or mouse tumor
XX PT necrosis factor receptor 2 are useful to treat disease associated with
XX PT mouse tumor necrosis factor receptor 2 expression.

XX Example 13; Col 44; 69pp; English.

XX The present invention describes compounds of 8-30 nucleobases antisense
XX to a nucleic acid encoding human or mouse tumor necrosis factor receptor
XX 2 (TNFR2). Also described is a method for inhibiting expression of human
XX or mouse TNFR2 comprising contacting cells or tissues in vitro with one
XX of the claimed compounds. The antisense compounds are used to treat a
XX disease or condition associated with expression of TNFR2. The present
XX sequence represents a PCR primer for human TNFR2, which is used in an
XX example from the present invention

XX SQ Sequence 21 BP; 4 A; 11 C; 0 G; 6 T; 0 U; 0 Other;

Query Match

Best Local Similarity 0.8%; Score 14.6; DB 1; Length 21;

Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 338 AGGACTTGAGATGGGCTG 358

DB 21 AGGAATTGAAGTGGGGAGTG 1

RESULT 491
ADB92791/c

ID ADB92791 standard; DNA; 21 BP.

XX AC ADB92791;

XX DT 04-DEC-2003 (first entry)

XX DE Human OCT1 consensus binding site EMSA probe top strand, OCT1 F.

XX KW Inflammatory bowel disease; Crohn's disease; ulcerative colitis; TNF;
XX KW tumour necrosis factor; polymorphism; haplotype; diagnosis; Caucasian;
XX KW antiinflammatory; gene therapy; TNF antagonist; OCT1; EMSA;
XX KW electrophoretic mobility shift assay; probe; ss.

XX OS Synthetic.

XX PN WO2003031651-A2.

XX PD 17-APR-2003.

XX PF 09-OCT-2002; 2002WO-GB004582.

XX PR 10-OCT-2001; 2001GB-00024315.

XX PA (OXAG-) OXAGEN LTD.

XX PI Van Heel D, Lench N;

XX DR WPI; 2003-393451/37.

XX PT Determining the susceptibility of a Caucasian subject to inflammatory
XX PT bowel disease such as Crohn's disease, comprises screening the genetic
XX PT material of the subject to determine which allele of the TNF -857C/T
XX PT polymorphism is present.

XX Example; Page 19; 39pp; English.

XX The invention relates to a method for determining the susceptibility of
XX an individual to inflammatory bowel disease. The method comprises
XX screening the genetic material of the individual to determine which
XX allele of the TNF (tumour necrosis factor) -857C/T polymorphism is
XX present. The invention also relates to a method of determining the
XX susceptibility to, or confirming the diagnosis of, Crohn's disease in a
XX Caucasian individual comprising screening the genetic material of the
XX subject for the presence of the TNF -1031C/-863C/-857C/-308G haplotype.
XX The invention additionally encompasses gene therapy for Crohn's disease
XX in a Caucasian with the -1031C/-863C/-857C/-308G haplotype, comprising
XX the introduction of genetic material comprising the TNF -1031T, -863T, -
XX 857T, and/or -308A alleles. The invention further discloses methods for
XX preventing TNF production for the treatment of inflammatory bowel
XX disease. Inflammatory bowel disease (IBD) is a chronic inflammatory
XX disease of the bowel gastrointestinal tract, and can exist as either
XX ulcerative colitis, or as Crohn's disease. The invention is based on the
XX discovery that the TNF haplotype -1031C/-863C/-857C/-308G haplotype
XX confers susceptibility to Crohn's disease in Caucasians. The TNF -857
XX allele acts independently of the known NOD2 gene polymorphisms
XX (Gly908Arg, and leu1007 FinsC) which also confer
XX susceptibility to inflammatory bowel disease, and certain embodiments of
XX the invention involve additional determination of these NOD2
XX polymorphisms. The methods are useful for determining susceptibility of a
XX (Caucasian) subject to inflammatory bowel disease, such as ulcerative
XX colitis or Crohn's disease. The methods are also useful for confirming
XX the diagnosis of a Caucasian subject as having Crohn's disease, or for
XX determining the response of a patient to treatment. The agents and the
XX genetic material, comprising TNF -1031T, -863T, -857T and/or -308A
XX alleles, or TNF -1031T/-863T/-857T/-308A haplotype, are useful in
XX manufacturing a medicament for preventing or treating Crohn's disease in
XX a Caucasian subject. Sequences ADB92791-ADB92792 represent the top and
XX bottom strands of a consensus OCT1 binding site EMSA (electrophoretic
XX mobility shift assay) probe used in the example of the invention. OCT1 is
XX a transcription factor for TNF.

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SQ Sequence 21 BP; 7 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
Query Match      0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1506 CATATTTCACATAAGAGAT 1526
DB 21 CCTATTTCATTAAGGAGCT 1

RESULT 492
ADB79190/C
ID ADB79190 standard; DNA; 21 BP.
XX AC ADB79190;
XX DT 04-DEC-2003 (first entry)
XX DE Nucleic acid encoding caspase-2 protease cleavage signal.
XX KW Protease; immunomodulator; antigen; antigen-presenting cell; reporter;
XX ds.
XX OS Unidentified.
XX PN WO2003065977-A2.
XX XX WO2003065977-A2.
XX PD 14-AUG-2003.
XX XX 20-NOV-2002; 2002WO-US037123.
XX PF 20-NOV-2001; 2001US-0331928P.
XX PR (DAND ) DANA FARBER CANCER INST.
XX PA Hirano N, Butler M, Nadler LM;
XX PI WPI; 2003-636934/60.
XX DR New vertebrate cell comprising a nucleic acid encoding an exogenous
XX PT antigen-presenting molecule or encoding a fusion polypeptide comprising
XX PT an antigen, useful for preparing a composition for modulating an immune
XX PT response.
XX PS Disclosure; Page 36; 91pp; English.
XX CC The invention relates to a new vertebrate cell. This cell comprises a
XX CC nucleic acid encoding an exogenous antigen-presenting molecule or a
XX CC fusion polypeptide. The polypeptide consists of an antigen fused in frame
XX CC at its N-terminus to a heterologous reporter polypeptide, where the
XX CC antigen is presented at the cell surface by the exogenous antigen-
XX CC presenting molecule, where the vertebrate cell functions as a
XX CC professional antigen presenting cell. The vertebrate cell further
XX CC comprises a nucleic acid encoding an exogenous immunoregulatory molecule.
XX CC It is a human immortalised cell. It comprises a dendritic cell, a
XX CC macrophage, a B cell, a mast cell, a parenchymal cell, a Kupffer cell or
XX CC a fibroblast cell. The antigen is fused to the heterologous reporter
XX CC polypeptide through a linker polypeptide. It is located at the C terminus
XX CC of the fusion polypeptide. The linker is cleavable by a cell-associated
XX CC protease, which is an endogenous protease or an exogenous protease
XX CC expressed by the nucleic acid encoding the protease. The antigen
XX CC encoded by the nucleic acid encoding an antigen fused in frame at its N
XX CC terminus to a heterologous reporter polypeptide is 8 to 10 amino acids in
XX CC length. The nucleic acid encoding an exogenous antigen-presenting
XX CC molecule encodes a class I molecule, which is an HLA or H-2 molecule. The
XX CC heterologous reporter polypeptide comprises a Green Fluorescent Protein.
XX CC It comprises a portion of a cell surface protein that is expressed on the
XX CC surface of a cell. It comprises a polypeptide which permits the cell to
XX CC survive in selective medium. The cell surface protein that is expressed
XX CC on the surface of a cell permits the selection of cells expressing the
XX CC reporter polypeptide by binding to an antibody specific for the cell
XX CC surface protein. The immunoregulatory molecule comprises a costimulatory
XX CC molecule, an accessory molecule, a cytokine, a chemokine and/or an
XX CC adhesion molecule. The costimulatory molecule is CD80 or CD83. The
XX CC antigen is a tumour-specific antigen. The vertebrate cell comprising a
XX CC nucleic acid encoding an exogenous antigen-presenting molecule or
XX CC encoding a fusion polypeptide comprising an antigen, is useful for
XX CC preparing a composition for modulating an immune response. The current
XX CC sequence represents a nucleic acid sequence encoding a caspase-2 protease
XX CC cleavage signal. Such a protease is useful to the invention for cleaving
XX CC the antigenic peptide from the heterologous polypeptide at the linker
XX CC sequence.
SQ Sequence 21 BP; 2 A; 5 C; 11 G; 3 T; 0 U; 0 Other;
Query Match      0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 372 CCAGGGTTTCAGCCACGTCCTC 392
DB 21 CCAGCCGTCGCCACGTCAC 1

RESULT 493
ADC64462
ID ADC64462 standard; DNA; 21 BP.
XX AC ADC64462;
XX XX ADC64462;
XX DT 18-DEC-2003 (first entry)
XX DE Rat ERK-3 designed oligonucleotide probe, E13, #2.
XX KW Rat; ss; antibody; extracellular signal regulated kinase-5; hERK-5; ERK;
XX KW mitogen activated protein kinase; MAP kinase; hybridoma;
XX KW diabetes mellitus; Alzheimer's disease; peripheral neuropathy;
XX KW gene therapy; antidiabetic; neuroprotective; ERK-3; probe.
XX OS Synthetic.
XX OS Rattus sp.
XX PN US6579972-B1.
XX XX 17-JUN-2003.
XX PF 09-SEP-1999; 99US-00393212.
XX PR 19-MAR-1993; 93US-00029404.
XX PR 02-JUN-1995; 95US-00459953.
XX XX (PLAC ) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.
XX PI Lechner C, Moller NP, Ullrich A;
XX WPI; 2003-634515/60.
XX PT New antibody, useful for preparing a composition for treating
XX PT extracellular signal regulated kinase - 5-associated diseases in a mammal
XX PT e.g., diabetes mellitus, Alzheimer's disease or peripheral neuropathies.
XX XX Example 1; Col 38; 40pp; English.
XX CC The invention discloses a new antibody comprising a specific binding
XX CC affinity to the human extracellular signal regulated kinase (hERK)-5
XX CC protein. ERKs are also referred to as mitogen activated protein (MAP)
XX CC kinases. The hybridoma that produces the monoclonal antibody is also
XX CC claimed. The antibody is useful for preparing a composition for treating
XX CC hERK-5-associated diseases e.g. diabetes mellitus, Alzheimer's disease or
XX CC peripheral neuropathies in a mammal. The polynucleotide encoding the
XX CC protein is also useful for treating these diseases using gene therapy
XX CC techniques. The sequence presented is an oligonucleotide probe, version
XX CC #2, which corresponds to a region of the rat ERK-3 coding sequence, and
XX CC was used designed as a 32 fold degenerate sequence from ERK1, ERK2 and
XX CC ERK3 to detect the human ERK-5 cDNA clone.
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XX Sequence 21 BP; 3 A; 4 C; 5 G; 5 T; 0 U; 4 Other;
SQ Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 66.7%; Pred. No. 6.4e+02;
Matches 14; Conservative 4; Mismatches 3; Indels 0; Gaps 0;

Qy 1156 ATGTGGGTGTGGCTGCATC 1176
Db 1 AYATKGKCTRGCTGCATC 21

RESULT 494
ADD35311/C
ID ADD35311 standard; DNA; 21 BP.
XX
AC ADD35311;
XX
DI 15-JAN-2004 (first entry)
XX
DE Human KIAA0172 associated primer #12.
XX
KW human; KIAA0172; cancer; ss; PCR; primer.
XX
OS Homo sapiens.
XX
PN JP2002369696-A.
XX
PD 24-DEC-2002.
XX
PF 01-APR-2002; 2002JP-00099422.
XX
PR 30-MAR-2001; 2001JP-00101401.
XX
PA (DOKU-) DOKURITSU GYOSEI HOJIN SANGYO GIJUTSU SO.
XX
PA (INFO-) INFO GENES CO LTD.
XX
PA (KAZU-) ZH KAZUSA DNA KENKYUSHO.
XX
DR WPI; 2003-495749/47.
XX
PT Human KIAA0172 gene encoding a sequence of 1194 amino acids, useful for
PT diagnosis and treatment of cancer and for development of effective growth
PT inhibitors of cancer cells.
XX
PS Example 3; SEQ ID NO 47; 40pp; Japanese.
XX
CC The invention relates to new human KIAA0172 gene. The KIAA0172 gene and
CC polypeptide are useful for detection and treatment of cancer. The present
CC sequence represents KIAA0172 associated primer.
XX
SQ Sequence 21 BP; 10 A; 0 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1679 CCAACTACATCTCCCTGCTT 1699
Db 21 CCAACTACCTTTCTCTCTT 1

RESULT 495
AAQ41809
ID AAQ41809 standard; DNA; 22 BP.
XX
AC AAQ41809;
XX
DI 25-MAR-2003 (revised)
DI 03-SEP-1993 (first entry)
XX
DE Baculovirus C2 complex binding site #6.
XX
KW Myc; c-myc; mammalian; E box; cancer; therapy; C1; C2; C2'; complex;
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```
KW homo-oligomer; hetero-oligomer; myogenin; Max; oncoprotein; primer;
KW probe; electrophoretic mobility shift assay; EMSA; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT protein_bind 13..18
FT /*tag= a
FT /note= "C2 complex binding site"
XX
PN W09308701-A1.
XX
PD 13-MAY-1993.
XX
PF 09-OCT-1992; 92WO-US008603.
XX
PR 30-OCT-1991; 91US-00785567.
XX
PA (SEHO ) GEN HOSPITAL CORP.
XX
PI Kingston RE, Papoulas O;
XX
DR WPI; 1993-167291/20.
XX
PT Prodn. of c-Myc protein from mammalian cells - and detection of c Myc
PT inhibitors for use in cancer therapy.
XX
PS Disclosure; Fig 7a; 10pp; English.
XX
CC The sequences given in AAQ41767-825 represent sequences which are bound
CC in an electrophoretic mobility shift assay (EMSA) by Myc. The isolated
CC sequences contain the central E box core of CAGGTG which binds very
CC weakly with Myc homo-oligomers (C1 complex), but more tightly with Myc
CC hetero-oligomers (C2 complex). The C2 complex requires a 26-29 kD factor
CC in addition to Myc. The additional factor copurifies with Myc and
CC resembles Max protein. A second copurifying 40-50 kD factor has been
CC identified (forming C2' complex). Sites selected by the C2' complex
CC contain the core CAGGTG which bears remarkable homology to a myogenin
CC binding site (see AAQ41763). Oligonucleotides containing the E box can be
CC used in the purification of Myc from a mammalian source. See also
CC AAQ41761-861. The isolated target sequences may be used in a method to
CC inhibit c-Myc oncoprotein activity. (Updated on 25-MAR-2003 to correct PN
CC field.)
XX
SQ Sequence 22 BP; 6 A; 9 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 6.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1263 CCCAACTGAGGAGACGTGGCC 1283
Db 1 CCCAACTAAGACCACGTGGCC 21

RESULT 496
AAZ44872
ID AAZ44872 standard; DNA; 22 BP.
XX
AC AAZ44872;
XX
DI 27-APR-2000 (first entry)
XX
DE Human apolipoprotein E PCR primer P1.
XX
KW Detection; primer extension; point mutation; pathogenicity; therapy;
KW cancer; genetic disease; polymorphism; apolipoprotein E; ApoE; human;
KW PCR primer; ss.
XX
OS Homo sapiens.
XX
PN US6013431-A.
XX
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PD 11-JAN-2000.
XX
XX 02-DEC-1993; 93US-00162376.
XX
XX 16-FEB-1990; 90US-00482005.
XX 15-FEB-1991; 91US-00656575.
XX
XX (MOLE-) MOLECULAR TOOL INC.
XX
XX Syvanen A, Soederlund HE;
XX
XX WPI; 2000-146544/13.
XX
XX Identifying the nucleotide at specific position in a target sequence for
XX detecting disease-related point mutations involves extending a primer
XX that binds adjacent to the specific site to incorporate a labeled
XX deoxynucleotide.
XX
XX Example 1; Col 9-10; 14pp; English.
XX
XX This invention describes a novel method for determining the identity of a
XX specific nucleotide at one or more defined sites in a target nucleic acid
XX polymer involves formation of a detectable primer extension product if
XX the specific nucleotide is present at the defined site in the target
XX nucleic acid. The method is specifically used to detect point mutations
XX which are associated with altered pathogenicity or resistance to therapy
XX in a microorganism, particularly human immune deficiency virus or with
XX cancer or a genetic disease (or susceptibility to it) in humans, but more
XX generally can be used to detect mutations in RNA or DNA from animals,
XX plants or microorganisms. By selecting a primer that binds adjacent to
XX the specific site, variations at this site can be detected following
XX incorporation of only a single dNTP. The method requires only a few,
XX simple manipulations, making it suitable for routine use, and allows
XX quantification of the proportion of mutated cells in a mixed population,
XX down to 0.5% of this population. The method is easily automated. This
XX sequence represents a PCR primer used to detect a polymorphism in human
XX apolipoprotein E (apoE)
XX
XX Sequence 22 BP; 9 A; 3 C; 6 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.6; DB 1; Length 22;
XX Best Local Similarity 81.0%; Pred. No. 6.7e+02;
XX Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX 1301 AGGAGTTCAAGCATACACT 1321
XX ||||| ||||| ||||| |||||
XX 2 AGGAGTTGAGGCTTACAAAT 22
XX
XX RESULT 497
XX AAC72227/c
XX ID AAC72227 standard; DNA; 22 BP.
XX
XX AC AAC72227;
XX
XX DT 09-FEB-2001 (first entry)
XX
XX DE Single nucleotide polymorphism PCR primer #1371.
XX
XX KW Single nucleotide polymorphism; SNP; human; genetic disease;
XX disease susceptibility; cardiovascular system; endocrine system;
XX neurological system; forensic testing; paternity testing; PCR primer; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO200058519-A2.
XX
XX PD 05-OCT-2000.
XX
XX PF 30-MAR-2000; 2000WO-US008440.
XX
XX PR 31-MAR-1999; 99US-0127248P.
XX
XX
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PA (WHEED ) WHITEHEAD INST BIOMEDICAL RES.
XX (AFFY-) AFFYMETRIX INC.
XX
XX Altshuler D, Cargill M, Daley GQ, Ireland JS, Lander ES;
XX Lipshutz RJ, Patil N, Sklar P;
XX
XX WPI; 2000-611722/58.
XX
XX Nucleic acid selected from one of 106 genes comprising single nucleotide
XX polymorphisms, allele-specific oligonucleotides to the genes are useful
XX for phenotypic correlations, forensics, paternity testing, medicine and
XX genetic analysis.
XX
XX Claim 8; Fig 5; 214pp; English.
XX
XX The present invention is concerned with a number of human single
XX nucleotide polymorphisms (SNPs) which the inventors identified in human
XX genes. These SNPs can be used in disease diagnosis and prediction of an
XX individual's susceptibility to disease, in forensic and paternity testing
XX and in genetic mapping. In particular, the SNPs of the invention can be
XX used to diagnose susceptibility to diseases of the cardiovascular,
XX endocrine and neurological systems, such as coronary artery disease,
XX schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
XX diseases
XX
XX Sequence 22 BP; 9 A; 3 C; 4 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.6; DB 1; Length 22;
XX Best Local Similarity 81.0%; Pred. No. 6.7e+02;
XX Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 1497 CACTACTTCCATATTTGGCACT 1517
XX ||||| ||||| ||||| |||||
XX 21 CATTAATTACGTATTTGGCACT 1
XX
XX RESULT 498
XX AAC80114/c
XX ID AAC80114 standard; DNA; 22 BP.
XX
XX AC AAC80114;
XX
XX DT 03-MAY-2001 (first entry)
XX
XX DE Reverse primer #26 used for amplification of HLA-A exon 2.
XX
XX KW HLA-A; HLA-B; HLA-C; typing; primer; human; ss.
XX
XX OS Homo sapiens.
XX Synthetic.
XX
XX PN WO2000061795-A2.
XX
XX PD 19-OCT-2000.
XX
XX PF 05-APR-2000; 2000WO-EF002998.
XX
XX PR 09-APR-1999; 99EP-00870068.
XX 11-JUN-1999; 99US-0138614P.
XX
XX (INNO-) INNOGENETICS NV.
XX
XX De Canck I, Rombout A, Rossau R;
XX
XX WPI; 2000-647426/62.
XX
XX Locus-specific, separate amplification of exon 2, exon 3, and/or exon 4
XX of human leukocyte antigen (HLA)-A, HLA-B, or HLA-C alleles using defined
XX primer sets, useful for subtyping or typing of HLA Class I alleles.
XX
XX Claim 4; Page 35; 128pp; English.
XX
XX The present invention relates to a method for the locus-specific,
XX
```

CC separate amplification of exon 2, exon 3, and/or exon 4 of human
CC leukocyte antigen (HLA)-A, HLA-B, or HLA-C alleles. The method is useful
CC for subtyping or typing of HLA class I alleles. The present sequence is
CC an amplification primer used in the method

XX Sequence 22 BP; 1 A; 10 C; 7 G; 3 T; 0 U; 1 Other;

SQ Query Match 0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 88.2%; Pred. No. 6.7e+02;
Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 249 TGACCTGGAGAGGCC 265

Db 22 TGCCCGGAGAGGCC 6

RESULT 499

AAS23687/C

ID AAS23687 standard; DNA; 22 BP.

XX AAS23687;

XX 04-DEC-2001 (first entry)

XX Primer A #1 used as probe for identifying C. albicans GRACE strain.

XX Gene identification; essential gene; GRAC3; pathogenic fungus;

XX gene replacement and conditional expression; fungal infection; probe; ss.

XX Candida albicans.

XX Synthetic.

XX WO200160975-A2.

XX 23-AUG-2001.

XX 20-FEB-2001; 2001WO-US005551.

XX 18-FEB-2000; 2000US-0183534P.

XX (ELIT-) ELITRA PHARM INC.

XX Roemer T, Jiang B, Boone C, Bussey H;

XX WPI; 2001-489080/53.

XX Identifying genes essential to fungal metabolisms and identifying

PT potential therapeutic agents that target these genes.

XX Disclosure; Page 301; 324pp; English.

XX The present invention relates to novel methods for constructing fungal
CC strains useful for identification and validation of gene products as
CC targets for therapeutic agents, for creating a collection of identified
CC essential genes, and screening assays for the discovery of new drugs. The
CC invention provides the GRACE (gene replacement and conditional
CC expression) method for the construction of mutant organisms referred to
CC as GRACE strains of the organism. The invention can be applied to any
CC organism, particularly a pathogenic fungus e.g. Candida albicans,
CC Aspergillus fumigatus and Cryptococcus neoformans. The methods are useful
CC to identify agents that may be used in the treatment of fungal
CC infections. AAS23687-AAS23747 represent primers A #1-61 used as probes
CC for identifying C. albicans GRACE strains

XX Sequence 22 BP; 3 A; 5 C; 4 G; 10 T; 0 U; 0 Other;

SQ Query Match 0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 6.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 130 CGATCAAGATGATCAACG 150

Db 22 CGATCAAGATGATCAACG 2

RESULT 500

ABS61060

ID ABS61060 standard; DNA; 22 BP.

XX ABS61060;

XX 05-NOV-2002 (first entry)

XX Human automated genomic bit analysis (GBA) PCR primer #37.

XX Human; ss; aminopeptidase P; XPNEP2; bradykinin receptor B1; primer;
XX BDKRB1; tachykinin receptor B1; TACR1; C1 esterase inhibitor; C1NH;
XX kallikrein 1; KLK1; bradykinin receptor B2; BDKRB2; gene therapy;
XX angiotensin converting enzyme 2; ACE2; protease inhibitor 4; P14;
XX polyploidy; haemangioma; tumour; sarcoma; Crohn's disease; trachoma;
XX cardiovascular disease; angina pectoris; hypertension; heart failure;
XX myocardial infarction; ventricular hypertrophy; vascular disease;
XX aneurysm; embolism; thrombosis; coronary artery disease; angiodema;
XX arteriosclerosis; atherosclerosis; hypersensitivity; sepsis; PCR;
XX autoimmune disease; inflammatory arthritis; cancer; wound; genotyping;
XX viral infection; bacterial infection; fungal infection; COPD; GBA;
XX chronic obstructive pulmonary disease; enterocolitis;
XX automated genetic bit analysis.

XX Homo sapiens.

XX WO200261131-A2.

XX 08-AUG-2002.

XX 03-DEC-2001; 2001WO-US047235.

XX 04-DEC-2000; 2000US-0251015P.

XX 23-JAN-2001; 2001US-0263678P.

XX 02-MAR-2001; 2001US-0273037P.

XX (BRIM) BRISTOL-MYERS SQUIBB CO.

XX (TSUC)/ TSUCHIHASHI Z.

XX (HUIL/) HUI L.

XX Tsuchihashi Z, Hui L, Zerba KE, Ma-Edmonds M, Perrone MH;

XX Swanson BN, Powell JR;

XX WPI; 2002-619285/66.

XX New isolated nucleic acid with at least one polymorphic position, useful
PT for detecting, diagnosing and treating disorders such as angioedema,
PT cancer, viral, bacterial or fungal infection, cardiovascular and
PT autoimmune diseases.

XX Example 3; Page 926; 977pp; English.

XX The invention relates to an isolated nucleic acid from a human gene
CC encoding aminopeptidase P (XPNEP2), bradykinin receptor B1 (BDKRB1),
CC tachykinin receptor B1 (TACR1), C1 esterase inhibitor (C1NH), kallikrein
CC 1 (KLK1), bradykinin receptor B2 (BDKRB2), angiotensin converting enzyme
CC 2 (ACE2) or protease inhibitor 4 (P14), comprising at least one
CC polymorphic position. Also included are (1) a probe that hybridises to a
CC polymorphic position as provided in the detailed summary of single
CC nucleotide polymorphisms comprising additional 5' and 3' flanking genomic
CC sequence; (2) analysing (M1) at least one nucleic acid sample comprising
CC obtaining the sample from one or more individuals and determining the
CC nucleic acid sequence at one or more polymorphic positions in a gene
CC encoding a protein selected from the group above; (3) constructing (M2)
CC haplotypes using the genes comprising grouping at least two nucleic acids
CC; (4) identifying (M3) an individual at risk of developing a disorder
CC upon administration of an ACE inhibitor and/or vasopeptidase inhibitor
CC using the polymorphic data; (5) a library of nucleic acids, each of which
CC comprises one or more polymorphic positions within a gene encoding a
CC human protein selected from the group above; and (6) genotyping (M4) an
CC individual comprising obtaining a nucleic acid sample, determining the

CC nucleotide present in at least one polymorphic position, and comparing at
CC least one position with a known data set. The genes (M1, M2, M3 and M4)
CC and compositions are useful for detecting, diagnosing, treating,
CC preventing various disorders such as angiodaema and diseases which
CC involve angiogenesis like haemangiomas, tumours, sarcomas, Crohn's
CC disease, trachomas, and cardiovascular diseases like angina pectoris,
CC hypertension, heart failure, myocardial infarction, ventricular
CC hypertrophy, vascular diseases, aneurysm, embolism, thrombosis, coronary
CC artery disease, arteriosclerosis and/or atherosclerosis, and
CC hypersensitivity reactions, sepsis, autoimmune diseases, inflammatory
CC arthritis, cancer, wounds, viral, bacterial or fungal infection, Chronic
CC obstructive pulmonary disease (COPD) and enterocolitis (many other
CC diseases and disorders are listed in the specification). The
CC polynucleotides are also useful for chromosome identification. Antibodies
CC against the proteins may be utilised for immunophenotyping of cell lines
CC and biological samples. The present sequence is a genotyping PCR primer
CC for the gene encoding one of the proteins listed above, using the method
CC of automated genetic bit analysis, GBA

XX Sequence 22 BP; 3 A; 6 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 6.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1594 GTGGTGACACCGAGTCTAA 1614
DB 1 GTGGTGACACCGAGTCTCA 21

RESULT 501
ABZ29860/c
ID ABZ29860 standard; DNA; 22 BP.

XX AC ABZ29860;

XX DT 30-JAN-2003 (first entry)

XX DE Candida albicans GRACE strain PCR primer SEQ ID NO 4011.

XX KW Fungus; yeast; tetracyclin; promoter; GRACE strain; biosynthesis;
XX signal transduction; DNA replication; cell division; growth;
XX proliferation; Candida albicans; fungicide; antifungal; PCR; primer; ss.
XX OS Candida albicans.

XX PN WO200253728-A2.

XX PD 11-JUL-2002.

XX PF 26-DEC-2001; 2001WO-US049486.

XX PR 29-DEC-2000; 2000US-0259128P.

XX PR 20-FEB-2001; 2001US-00792024.

XX PR 22-AUG-2001; 2001US-0314050P.

XX PA (ELIT-) ELITRA PHARM INC.

XX PI Roemer T, Jiang B, Boone C, Bussey H, Ohlsen KL;

XX DR WPI; 2002-566694/50.

XX PT Constructing strains for identifying gene products as effective targets
XX for therapeutic intervention, by inactivating in the strain one allele of
XX a gene and placing other allele of the gene under conditional expression.

XX PS Claim 36; SEQ ID NO 4011; 167bp + Sequence Listing; English.

XX CC The invention relates to constructing (M1) a strain of diploid fungal
XX cells in which both alleles of a gene are modified, comprising modifying
XX one allele by insertion or replacement by a cassette having an
XX expressible selectable marker and modifying other allele by
XX recombination, of a promoter replacement fragment with a heterologous

CC promoter, so that expression of the second allele is regulated by the
CC promoter. (M1) is useful for constructing a strain of diploid fungal
CC cells in which both alleles of a gene are modified. The diploid fungal
CC cells having both alleles modified are useful for identifying a gene that
CC is essential to the survival or growth of a fungus, a gene that
CC contributes to the virulence and/or pathogenicity of a fungus, a gene
CC agent, an antifungal agent that inhibits the growth of a diploid fungus
CC and for identifying a therapeutic agent for treatment of a mammalian
CC disease. (M1) is useful for identifying a compound which modulates the
CC activity of a gene product, preferably enzymatic activity, carbon
CC compound catabolism, biosynthesis, transporter, transcriptional,
CC translational, signal transduction, DNA replication and cell division
CC activity. The method is useful for identifying a compound having the
CC ability to inhibit growth or proliferation of C. albicans cells and for
CC treating infection by C. albicans. The present sequence is that of a PCR
CC primer used in the method of the invention. Note: The sequence data for
CC this patent is not represented in the printed specification but is based
CC on sequence information supplied to Derwent by the European Patent Office

XX Sequence 22 BP; 3 A; 5 C; 4 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 6.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 130 CGGATGAGAGATCAACGG 150
DB 22 CGAATCAAGATGATCAACAG 2

RESULT 502

ABN89966
ID ABN89966 standard; DNA; 22 BP.

XX AC ABN89966;

XX DT 22-AUG-2002 (first entry)

XX DE Human NOVI forward PCR primer SEQ ID NO:14.

XX KW Human; NOVI; NOVX; endozone-related protein precursor-like protein;
XX cytosolic; antiarteriosclerotic; antidiabetic; anti-HIV; antiasthmatic;
XX anti-inflammatory; haemostatic; hypotensive; neuroprotective; anorectic;
XX nootropic; antidepressant; immunosuppressive; analgesic; cardiant;
XX gastrointestinal; anticonvulsant; immunomodulator; tranquiliser;
XX antialcolic; antilipemic; gene therapy; cancer; Alzheimer's disease;
XX stroke; tuberculous sclerosis; Parkinson's disease; hypercalcaemia;
XX Huntington's disease; cerebral palsy; epilepsy; Lesch-Nyhan syndrome;
XX multiple sclerosis; ataxia-telangiectasia; leukodystrophy; addiction;
XX anxiety; depression; neurodegenerative disorder; stress; immune disorder;
XX alcoholism; obesity; diabetes; haematopoietic disorder; dyslipidaemia;
XX wasting disorder; PCR primer; ss.

XX OS Homo sapiens.

XX PN WO200234782-A2.

XX PD 02-MAY-2002.

XX PF 23-OCT-2001; 2001WO-US046005.

XX PR 23-OCT-2000; 2000US-0242485P.

XX PR 22-JAN-2001; 2001US-0283339P.

XX PR 29-JAN-2001; 2001US-0264850P.

XX PR 22-OCT-2001; 2001US-00035568.

XX PA (CURA-) CURAGEN CORP.

XX PI Gerlach V, MacDougall JR, Millet I, Gunther E, Ellerman K;

XX PI Grose WM, Alsobrook JP, Lepley DM, Burgess CE, Vernat CM;

XX PI Shency S, Spytek KA, Mishra V, Padigaru M;

DR WPI; 2002-479708/51.
XX
XX New NOVX or NOV1 polypeptides and nucleic acids, useful for preventing or
PT treating NOVX-associated disorders e.g. cardiomyopathy, atherosclerosis,
PT cancer, Huntington's disease or Alzheimer's disease.
XX
XX Example 2; Page 96; 124pp; English.
XX
XX The present invention describes human NOV1 (an endozepine-related protein
CC precursor-like protein). Human NOV1 maps to human chromosome 10. NOV1 has
CC cytosolic, antiarteriosclerotic, antidiabetic, haemostatic, anti-HIV,
CC antiasthmatic, anti-inflammatory, hypotensive, neuroprotective,
CC anorectic, nootropic, antidepressant, immunosuppressive, tranquiliser,
CC analgesic, cardiact, gastrointestinal, anticonvulsant, immunomodulator,
CC antialcoholic and antilipaeamic activities, and can be used in gene
CC therapy. NOVX nucleic acids, polypeptides and antibodies are useful for
CC treating or diagnosing diseases such as cancers, Von Hippel-Lindau
CC syndrome, Alzheimer's disease, stroke, tuberous sclerosis, Parkinson's
CC disease, hypercalcaemia, Huntington's disease, cerebral palsy, epilepsy,
CC Lesch-Nyhan syndrome, multiple sclerosis, ataxia-telangiectasia, pain,
CC leukodystrophies, behavioural disorders, addiction, anxiety, depression,
CC neurodegenerative disorders, stress, immune disorders, alcoholism,
CC obesity, diabetes, haematopoietic disorders, dyslipidaemias, and wasting
CC disorders associated with chronic diseases. The nucleic acids and
CC polypeptides may also be used as targets for the identification of small
CC molecules that modulate or inhibit e.g. neurogenesis, cell proliferation,
CC cell differentiation, haematopoiesis, wound healing and angiogenesis. The
CC present sequence represents a PCR primer for human NOV1, which is used in
CC an example from the present invention
XX
XX Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;
SQ

Query Match 0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 6.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 886 GGGAACATCATCAACATGCAC 906
Db 2 GGCAAAATCATCAACATCAAC 22
|||||

RESULT 503
ABQ81301/c
ID ABQ81301 standard; DNA; 22 BP.
XX
AC ABQ81301;
XX
XX 12-DEC-2002 (first entry)
XX Cytochrome P450 CYP27A1 antisense primer.
XX
XX Cytochrome P450; CYP27A1; enzyme; tachyphylaxis; drug tolerance; human;
XX psoriasis; antipsoriatic; antipruritic; dermatological; PCR; primer; ss.
XX Homo sapiens.
XX WO200245704-A2.
XX
XX 13-JUN-2002.
XX
XX 04-DEC-2001; 2001WO-GB005369.
XX
XX 04-DEC-2000; 2000GB-00029524.
XX
XX (MOLE-) MOLECULAR SKINCARE LTD.
XX
XX Adcocks C, Bavik C, Cork M, Duff G, Tazi-Ahmini R, Ward S;
XX
XX WPI; 2002-713234/77.
XX
XX Alleviating or preventing a tachyphylactic response to an agent and
PT treating psoriasis, comprises administering an antagonist of a metabolic
PT enzyme, which is induced as a result of exposure to the agent, to a

PT patient.
XX
XX Example 1; Page 75; 136pp; English.
XX
XX The present sequence is an antisense primer for cytochrome P450 CYP27A1.
CC RT-PCR was used to characterise metabolic enzyme induction by vitamin D
CC analogues, corticosteroids and macrolactams in human skin. The invention
CC provides for the use of antagonists of P450 enzymes for the prevention or
CC alleviation of a tachyphylactic response to administration of a vitamin D
CC analogue, corticosteroid or macrolactam to a patient, e.g. for the
CC treatment of psoriasis. The underlying cause of tachyphylaxis was shown
CC to be degradation of a drug in the patient, rather than desensitization
CC or receptor down-regulation. Exposure of a patient to the drug for
CC extended periods results in an increase in the expression of enzymes
CC which are capable of metabolizing the drug. A method for treatment of
CC tachyphylaxis therefore involves inhibiting the induced metabolic enzyme,
CC especially a P450 cytochrome, by administration of an antagonist of the
CC enzyme. Detection of an increase in the amount and/or activity of a
CC metabolic enzyme capable of metabolizing a drug following extended
CC exposure of a cell from an individual to the drug indicates the increased
CC likelihood of that individual developing a tachyphylactic response to the
CC drug
XX
XX Sequence 22 BP; 5 A; 9 C; 3 G; 5 T; 0 U; 0 Other;
SQ

Query Match 0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 6.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 864 GAAGCAGTACTGGATGACTG 884
Db 21 GAAGCGATACCTGGATGTTG 1
|||||

RESULT 504
AAL43364
ID AAL43364 standard; DNA; 22 BP.
XX
AC AAL43364;
XX
XX 22-AUG-2002 (first entry)
XX Bacillus sp novel acid protease PCR primer D165-S.
XX Acid protease; PCR; primer; ss; digestive enzyme; protein hydrolysis;
XX drug production; food production; enzyme.
XX Bacillus sp.
XX OS
XX JP2002078489-A.
XX
XX 19-MAR-2002.
XX
XX 04-SEP-2000; 2000JP-00267840.
XX
XX 04-SEP-2000; 2000JP-00267840.
XX
XX (DAIW) DAIWA KASEI KK.
XX
XX WPI; 2002-430301/46.
XX
XX A new acid protease in which the serine residue participates to activity
PT expression.
XX
XX Example 4; Page 8; 25pp; Japanese.
XX
XX The invention comprises the amino acid and coding sequences of two novel
CC Bacillus sp acid proteases. The novel acid proteases of the invention are
CC useful as digestive enzymes for the hydrolysis of proteins in drugs and
CC foods. The present DNA sequence represents a PCR primer that is specific
CC for the gene sequence of a Bacillus sp acid protease
XX
XX Sequence 22 BP; 5 A; 7 C; 8 G; 2 T; 0 U; 0 Other;
SQ

Query Match 0.8%; Score 14.6; DB 1; Length 22;
 Best Local Similarity 81.0%; Pred. No. 6.7e+02;
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1468 CTGGGGAGCGGATCCACAA 1488
 DB 1 CGGGCCGCGGATCCACAG 21

RESULT 505
 AAL43365/C
 ID AAL43365 standard; DNA; 22 BP.
 XX
 AC AAL43365;
 DT 22-AUG-2002 (first entry)
 DE Bacillus sp novel acid protease PCR primer D165-ASS.
 KW Acid protease; PCR; primer; ss; digestive enzyme; protein hydrolysis;
 KW drug production; food production; enzyme.
 XX
 OS Bacillus sp.
 XX
 PN JP2002078489-A.
 PD 19-MAR-2002.
 XX
 PF 04-SEP-2000; 2000JP-00267840.
 XX
 PR 04-SEP-2000; 2000JP-00267840.
 XX
 PA (DAIW) DAIWA KASEI KK.
 DR WPI; 2002-430301/46.
 XX
 PT A new acid protease in which the serine residue participates to activity
 PT expression.
 XX
 PS Example 4; Page 8; 25pp; Japanese.
 CC The invention comprises the amino acid and coding sequences of two novel
 CC Bacillus sp acid proteases. The novel acid proteases of the invention are
 CC useful as digestive enzymes for the hydrolysis of proteins in drugs and
 CC foods. The present DNA sequence represents a PCR primer that is specific
 CC for the gene sequence of a Bacillus sp acid protease
 XX
 SQ Sequence 22 BP; 1 A; 9 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 22;
 Best Local Similarity 81.0%; Pred. No. 6.7e+02;
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1466 GTCTGGGGAGCGGATCCACA 1486
 DB 22 GCGGGGCGCGGATCCACA 2

RESULT 506
 AAL43783
 ID AAL43783 standard; DNA; 22 BP.
 XX
 AC AAL43783;
 DT 26-SEP-2002 (first entry)
 DE Human NOV2 gene PCR primer: SEQ ID NO 39.
 KW Human; PCR; primer; ss; gene therapy; vaccine; NOV2; NOVX; cancer;
 KW neurodegenerative disorder; immune disorder; haematopoietic disorder;
 KW dyslipidaemia; obesity; metabolic syndrome X; wasting disorder; pain;
 KW Von Hippel-Lindau syndrome; Alzheimer's disease; stroke; cerebral palsy;
 KW tuberosus sclerosis; hypercalcaemia; Parkinson's disease; epilepsy;

tuberosus sclerosis; hypercalcaemia; Parkinson's disease; epilepsy;
 Huntington's disease; Leisch-Nyhan syndrome; ataxia-telangiectasia;
 depression; stress; diabetes.
 XX
 OS Homo sapiens.
 XX
 PN WO200244211-A2.
 XX
 PD 06-JUN-2002.
 XX
 PF 29-NOV-2001; 2001WO-US048842.
 XX
 PR 29-NOV-2000; 2000US-0253834P.
 PR 25-JAN-2001; 2001US-0264180P.
 PR 20-AUG-2001; 2001US-0313656P.
 XX
 PA (CURA-) CURAGEN CORP.
 XX
 PI Edinger SR, Macdougall JR, Millet I, Ellerman K, Stone DJ;
 PI Gerlach VL, Grosse WM, Alsobrook JP, Lepley DM, Reiger DK;
 PI Burgess CE, Casman SJ, Spytek KA, Boldog FL, Li L, Padigaru M;
 PI Mishra V, Patturajan M, Shenoy SK, Rastelli L, Tchernev VT;
 PI Vernet CAM, Zerhusen BD, Malyankar UM, Guo X, Miller CE;
 PI Gangolli EA;
 XX
 DR WPI; 2002-527702/56.
 XX
 PT Novel cytoplasmic, nuclear, membrane bound and secreted NOVX
 PT polypeptides, useful for treating cancers, neurodegenerative disorders,
 PT immune disorders, hematopoietic disorders, diabetes and metabolic
 PT disorders.
 XX
 PS Example 3; Page 130; 155pp; English.
 CC The invention comprises the amino acid and coding sequences of human
 CC NOVX (NOV1 and NOV2) proteins. The NOVX proteins of the invention are
 CC useful for identifying an agent (a cellular receptor or downstream
 CC effector) that binds to a NOVX protein. The NOVX DNA and protein
 CC sequences of the invention are useful for the treatment (gene therapy) or
 CC prevention (vaccine) of: cancer; neurodegenerative disorders; immune
 CC disorders; haematopoietic disorders; dyslipidaemia; obesity; metabolic
 CC syndrome X; wasting disorders; Von Hippel-Lindau (VHL) syndrome;
 CC Alzheimer's disease; stroke; tuberosus sclerosis; hypercalcaemia;
 CC Parkinson's disease; Huntington's disease; cerebral palsy; epilepsy;
 CC Leisch-Nyhan syndrome; ataxia-telangiectasia; pain; depression; stress and
 CC diabetes. The present DNA sequence represents a NOV2 gene PCR primer
 XX
 SQ Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 22;
 Best Local Similarity 81.0%; Pred. No. 6.7e+02;
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 886 GGGACATCATCAACATGCAC 906
 DB 2 GCGAAATCATCAACATCAAC 22

RESULT 507
 AAL43762
 ID AAL43762 standard; DNA; 22 BP.
 XX
 AC AAL43762;
 DT 26-SEP-2002 (first entry)
 XX
 DE Human NOV1 gene PCR primer: SEQ ID NO 18.
 KW Human; PCR; primer; ss; gene therapy; vaccine; NOV1; NOVX; cancer;
 KW neurodegenerative disorder; immune disorder; haematopoietic disorder;
 KW dyslipidaemia; obesity; metabolic syndrome X; wasting disorder; pain;
 KW Von Hippel-Lindau syndrome; Alzheimer's disease; stroke; cerebral palsy;
 KW tuberosus sclerosis; hypercalcaemia; Parkinson's disease; epilepsy;

KW Huntington's disease; Lesch-Nyhan syndrome; ataxia-telangiectasia;
 XX depression; stress; diabetes.

OS Homo sapiens.

XX WO200244211-A2.

XX PD 06-JUN-2002.

XX PF 29-NOV-2001; 2001WO-US048842.

XX PR 29-NOV-2000; 2000US-0253834P.

XX PR 25-JAN-2001; 2001US-0264180P.

XX PR 20-AUG-2001; 2001US-0313656P.

XX PA (CURA-) CURAGEN CORP.

XX PI Edinger SR, Macdougall JR, Millet I, Ellerman K, Stone DJ;
 PI Gerlach VL, Grosse WM, Alsobrook JP, Lepley DM, Reiger DK;
 PI Burgess CE, Casman SJ, Spytek KA, Boldog FL, Li L, Padigaru M;
 PI Mishra V, Patturajan M, Shenoy SK, Rastelli L, Tchernev VT;
 PI Vernet CAM, Zerhusen BD, Malyankar UM, Guo X, Miller CE;
 PI Gangolli EA;

XX DR WPI; 2002-527702/56.

XX Novel cytoplasmic, nuclear, membrane bound and secreted NOVX
 PT polypeptides, useful for treating cancers, neurodegenerative disorders,
 PT immune disorders, hematopoietic disorders, diabetes and metabolic
 PT disorders.

XX Example 3; Page 110; 155pp; English.

XX The invention comprises the amino acid and coding sequences of human
 CC NOVX (NOV1 and NOV2) proteins. The NOVX proteins of the invention are
 CC useful for identifying an agent (a cellular receptor or downstream
 CC effector) that binds to a NOVX protein. The NOVX DNA and protein
 CC sequences of the invention are useful for the treatment (gene therapy) or
 CC prevention (vaccine) of: cancer; neurodegenerative disorders; immune
 CC disorders; hematopoietic disorders; dyslipidaemia; obesity; metabolic
 CC syndrome X; wasting disorders; Von Hippel-Lindau (VHL) syndrome;
 CC Alzheimer's disease; stroke; tuberculous sclerosis; hypercalcaemia;
 CC Parkinson's disease; Huntington's disease; cerebral palsy; epilepsy;
 CC Lesch-Nyhan syndrome; ataxia-telangiectasia; pain; depression; stress and
 CC diabetes. The present DNA sequence represents a NOV1 gene PCR primer

XX Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 22;
 Best Local Similarity 81.0%; Pred. No. 6.7e+02;
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 886 GGGACATCATCAACATGCAC 906

DB 2 GGCAAAATCATCAACATCAAC 22

RESULT 508

AAL43777

ID AAL43777 standard; DNA; 22 BP.

XX AAL43777;

XX 26-SEP-2002 (first entry)

XX Human NOV1 gene PCR primer: SEQ ID NO 33.

XX Human; PCR; primer; ss; gene therapy; vaccine; NOV1; NOVX; cancer;
 KW neurodegenerative disorder; immune disorder; hematopoietic disorder;
 KW dyslipidaemia; obesity; metabolic syndrome X; wasting disorder; pain;
 KW Von Hippel-Lindau syndrome; Alzheimer's disease; stroke; cerebral palsy;
 KW tuberculous sclerosis; hypercalcaemia; Parkinson's disease; epilepsy;
 KW Huntington's disease; Lesch-Nyhan syndrome; ataxia-telangiectasia;

KW depression; stress; diabetes.

XX Homo sapiens.

XX WO200244211-A2.

XX PD 06-JUN-2002.

XX PF 29-NOV-2001; 2001WO-US048842.

XX PR 29-NOV-2000; 2000US-0253834P.

XX PR 25-JAN-2001; 2001US-0264180P.

XX PR 20-AUG-2001; 2001US-0313656P.

XX PA (CURA-) CURAGEN CORP.

XX PI Edinger SR, Macdougall JR, Millet I, Ellerman K, Stone DJ;
 PI Gerlach VL, Grosse WM, Alsobrook JP, Lepley DM, Reiger DK;
 PI Burgess CE, Casman SJ, Spytek KA, Boldog FL, Li L, Padigaru M;
 PI Mishra V, Patturajan M, Shenoy SK, Rastelli L, Tchernev VT;
 PI Vernet CAM, Zerhusen BD, Malyankar UM, Guo X, Miller CE;
 PI Gangolli EA;

XX DR WPI; 2002-527702/56.

XX Novel cytoplasmic, nuclear, membrane bound and secreted NOVX
 PT polypeptides, useful for treating cancers, neurodegenerative disorders,
 PT immune disorders, hematopoietic disorders, diabetes and metabolic
 PT disorders.

XX Example 3; Page 111; 155pp; English.

XX The invention comprises the amino acid and coding sequences of human
 CC NOVX (NOV1 and NOV2) proteins. The NOVX proteins of the invention are
 CC useful for identifying an agent (a cellular receptor or downstream
 CC effector) that binds to a NOVX protein. The NOVX DNA and protein
 CC sequences of the invention are useful for the treatment (gene therapy) or
 CC prevention (vaccine) of: cancer; neurodegenerative disorders; immune
 CC disorders; hematopoietic disorders; dyslipidaemia; obesity; metabolic
 CC syndrome X; wasting disorders; Von Hippel-Lindau (VHL) syndrome;
 CC Alzheimer's disease; stroke; tuberculous sclerosis; hypercalcaemia;
 CC Parkinson's disease; Huntington's disease; cerebral palsy; epilepsy;
 CC Lesch-Nyhan syndrome; ataxia-telangiectasia; pain; depression; stress and
 CC diabetes. The present DNA sequence represents a NOV1 gene PCR primer

XX Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 22;
 Best Local Similarity 81.0%; Pred. No. 6.7e+02;
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 886 GGGACATCATCAACATGCAC 906

DB 2 GGCAAAATCATCAACATCAAC 22

RESULT 509

AAL43795

ID AAL43795 standard; DNA; 22 BP.

XX AAL43795;

XX 26-SEP-2002 (first entry)

XX Human NOV2 gene PCR primer: SEQ ID NO 51.

XX Human; PCR; primer; ss; gene therapy; vaccine; NOV2; NOVX; cancer;
 KW neurodegenerative disorder; immune disorder; hematopoietic disorder;
 KW dyslipidaemia; obesity; metabolic syndrome X; wasting disorder; pain;
 KW Von Hippel-Lindau syndrome; Alzheimer's disease; stroke; cerebral palsy;
 KW tuberculous sclerosis; hypercalcaemia; Parkinson's disease; epilepsy;
 KW Huntington's disease; Lesch-Nyhan syndrome; ataxia-telangiectasia;
 KW depression; stress; diabetes.

XX OS Homo sapiens.
 XX PN WO20024211-A2.
 XX PD 06-JUN-2002.
 XX PF 29-NOV-2001; 2001WO-US048842.
 XX PR 29-NOV-2000; 2000US-0253834P.
 XX PR 25-JAN-2001; 2001US-0264180P.
 XX PR 20-AUG-2001; 2001US-0313656P.
 XX PA (CURA-) CURAGEN CORP.
 XX PI Edinger SR, Macdougall JR, Millet I, Ellerman K, Stone DJ;
 PI Gerlach VL, Grosse WM, Alsbrook JP, Lepley DM, Reiger DK;
 PI Burgess CE, Casman SJ, Spytek KA, Boldog FL, Li L, Padigaru M;
 PI Mishra V, Patturajan M, Shency SK, Rastelli L, Tchernev VT;
 PI Vernet CAM, Zethusen BD, Malyankar UM, Guo X, Miller CE;
 PI Gangolli BA;
 XX WPI; 2002-527702/56.
 XX PR Novel cytoplasmic, nuclear, membrane bound and secreted NOVX
 PT polypeptides, useful for treating cancers, neurodegenerative disorders,
 PT immune disorders, hematopoietic disorders, diabetes and metabolic
 PT disorders.
 XX Example 3; Page 130; 155pp; English.
 XX The invention comprises the amino acid and coding sequences of human
 CC NOVX (NOVI and NOV2) proteins. The NOVX proteins of the invention are
 CC useful for identifying an agent (a cellular receptor or downstream
 CC effector) that binds to a NOVX protein. The NOVX DNA and protein
 CC sequences of the invention are useful for the treatment (gene therapy) or
 CC prevention (vaccine) of: cancer; neurodegenerative disorders; immune
 CC disorders; hematopoietic disorders; dyslipidaemia; obesity; metabolic
 CC syndrome X; wasting disorders; von Hippel-Lindau (VHL) syndrome;
 CC Alzheimer's disease; stroke; tuberculous sclerosis; hypercalcaemia;
 CC Parkinson's disease; Huntington's disease; cerebral palsy; epilepsy;
 CC Lesh-Nyhan syndrome; ataxia-telangiectasia; pain; depression; stress and
 CC diabetes. The present DNA sequence represents a NOV2 gene PCR primer
 XX Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 22;
 Best Local Similarity 81.0%; Pred. No. 6.7e+02;
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 886 GGGAAATCATCATCAATGCAC 906
 DB 2 GGCRAAATCATCAATCAAC 22

RESULT 510
 ACD13238/C
 ID ACD13238 standard; DNA; 22 BP.
 XX ACD13238;
 AC ACD13238;
 XX 13-AUG-2003 (first entry)
 DT Novel human protein associated PCR primer #6.
 DE NOVX; autoimmune disease; allergy; Alzheimer's disease; stroke;
 XX Parkinson's disease; Huntington's disease; multiple sclerosis; addiction;
 KW anxiety; pain; diabetes; glomerulonephritis; obesity;
 KW systemic lupus erythematosus; asthma; scleroderma; pancreatitis;
 KW graft versus host disease; ulcer; anaemia; cancer; trauma; infection;
 KW cardiomyopathy; atherosclerosis; hypertension; AIDS; Crohn's disease;
 KW acquired immunodeficiency syndrome; chromosomal mapping; tissue typing;
 KW forensic biology; predictive medicine; gene therapy; human; PCR; primer;

KW SS.
 XX Homo sapiens.
 XX WO200298900-A2.
 XX PD 12-DEC-2002.
 XX PF 04-JUN-2002; 2002WO-US017558.
 XX PR 04-JUN-2001; 2001US-0295607P.
 PR 04-JUN-2001; 2001US-0295661P.
 PR 06-JUN-2001; 2001US-0296404P.
 PR 07-JUN-2001; 2001US-0296418P.
 PR 07-JUN-2001; 2001US-0296575P.
 PR 11-JUN-2001; 2001US-0297414P.
 PR 12-JUN-2001; 2001US-0297567P.
 PR 15-JUN-2001; 2001US-0298528P.
 PR 18-JUN-2001; 2001US-0299133P.
 PR 19-JUN-2001; 2001US-0299230P.
 PR 21-JUN-2001; 2001US-0299949P.
 PR 22-JUN-2001; 2001US-0300177P.
 PR 26-JUN-2001; 2001US-0300883P.
 PR 28-JUN-2001; 2001US-0301530P.
 PR 28-JUN-2001; 2001US-0301550P.
 PR 03-JUL-2001; 2001US-0302951P.
 PR 12-SEP-2001; 2001US-0318727P.
 PR 27-SEP-2001; 2001US-0325685P.
 PR 22-FEB-2002; 2002US-0358814P.
 PR 03-JUN-2002; 2002US-00161927.
 XX (CURA-) CURAGEN CORP.
 PA Zethusen BD, Kekuda R, Spytek KA, Shency SG, Miller CE, Hjalt T;
 PI Gerlach VL, Baumgartner JC, Guo X, Gangolli BA, Vernet CAM;
 PI Padigaru M, Li L, Pena CEA, Gorman L, Anderson DW, Edinger SR;
 PI Patturajan M, Stone DJ;
 XX WPI; 2003-140585/13.
 XX Novel isolated NOVX polypeptide useful treating or preventing disorders
 PT or syndromes such as autoimmune disease, allergies, Alzheimer's disease,
 PT stroke, Parkinson's disease, Huntington's disease or multiple sclerosis.
 XX Example 39; Page 241; 408pp; English.
 XX The invention describes an isolated NOVX polypeptide (I) comprising a
 CC sequence selected from a sequence (SI) of 1121, 635, 239, 1720, 176, 583,
 CC 214, 395, 1098, 134, 427, 1333, 407, 806, 804, 1253, 382, 1045, 284, 496,
 CC 506, 759, 390, 133, 215, 240, 1069, 116, 439, 1138, 477, 316, 269, 219,
 CC 305, 406, 460, 365, 380, 829 or 326 amino acids fully defined in the
 CC specification, and the mature form of SI. (I) is useful for treating or
 CC preventing a pathology associated with (I) in a subject, preferably
 CC human, or for identifying an agent that binds to (I), where the agent is
 CC a cellular receptor or a downstream effector. (II), a polynucleotide (II)
 CC encoding (I) or an anti-(I)-antibody (V) is useful treating or preventing
 CC disorders or syndromes such as autoimmune disease, allergies, Alzheimer's
 CC disease, stroke, Parkinson's disease, Huntington's disease, multiple
 CC sclerosis, addiction, anxiety, pain, diabetes, glomerulonephritis,
 CC systemic lupus erythematosus, asthma, scleroderma, graft versus host
 CC disease, pancreatitis, obesity, ulcers, anaemia, cancer, trauma, vital,
 CC bacterial or parasitic infections, cardiomyopathy, atherosclerosis,
 CC hypertension, acquired immunodeficiency syndrome (AIDS) or Crohn's
 CC disease. (I), (II) or (V) is useful in screening assays, detection assays
 CC (e.g., chromosomal mapping, tissue typing, forensic biology), predictive
 CC medicine (e.g., diagnostic assays, prognostic assays, monitoring clinical
 CC trials and pharmacogenomic), and in methods of treatment (e.g.,
 CC therapeutic and prophylactic). (II) is useful in gene therapy, to express
 CC (I), to detect NOVX mRNA or a genetic lesion in a NOVX gene, and to
 CC modulate NOVX activity. This sequence represents a primer used to isolate
 CC DNA encoding a novel human NOV protein
 XX Sequence 22 BP; 5 A; 6 C; 4 G; 7 T; 0 U; 0 Other;


```
Query Match      0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 6.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 155 TGTCATGACACTCCGAGGTG 175
DB 22 TGTCTATGACACTCGAAGGAG 2

RESULT 511
ID ABX72300 standard; DNA; 22 BP.
XX AC ABX72300;
XX DT 03-JUN-2003 (first entry);
XX DE Human NOVX DNA PCR primer #17.
XX KW Human; NOVX; PCR; ss; metabolic disorder; cardiomyopathy; diabetes; ASD;
KW hypertension; congenital heart defect; aortic stenosis; valve disease;
KW atrial septal defect; atrioventricular canal defect; ductus arteriosus;
KW pulmonary stenosis; subaortic stenosis; ventricular septal defect; VSD;
KW tuberosus sclerosis; scleroderma; atherosclerosis; infectious disease;
KW obesity; anorexia; neurodegenerative disorder; Alzheimer's disease;
KW Parkinson's disease; immune disorder; haematopoietic disorder; primer;
KW haemophilia; hypercoagulation; Crohn's disease; cancer.
XX OS Homo sapiens.
XX PN WO200281498-A2.
XX PD 17-OCT-2002.
XX PF 03-APR-2002; 2002WO-US010780.
XX PR 03-APR-2001; 2001US-0281086P.
PR 03-APR-2001; 2001US-0281136P.
PR 05-APR-2001; 2001US-0281863P.
PR 05-APR-2001; 2001US-0281906P.
PR 06-APR-2001; 2001US-0282020P.
PR 10-APR-2001; 2001US-0282930P.
PR 10-APR-2001; 2001US-0282934P.
PR 12-APR-2001; 2001US-0283512P.
PR 13-APR-2001; 2001US-0283710P.
PR 17-APR-2001; 2001US-0284234P.
PR 19-APR-2001; 2001US-0285325P.
PR 20-APR-2001; 2001US-0285381P.
PR 20-APR-2001; 2001US-0285609P.
PR 23-APR-2001; 2001US-0285748P.
PR 24-APR-2001; 2001US-0285890P.
PR 25-APR-2001; 2001US-0286068P.
PR 27-APR-2001; 2001US-0287213P.
PR 02-MAY-2001; 2001US-0288257P.
PR 29-MAY-2001; 2001US-0294164P.
PR 30-MAY-2001; 2001US-0294484P.
PR 18-JUN-2001; 2001US-0298952P.
PR 19-JUN-2001; 2001US-0299237P.
PR 19-JUN-2001; 2001US-0299276P.
PR 12-SEP-2001; 2001US-0318750P.
PR 25-SEP-2001; 2001US-0324500P.
PR 25-SEP-2001; 2001US-0324502P.
PR 27-SEP-2001; 2001US-0325684P.
PR 17-OCT-2001; 2001US-0330143P.
PR 14-NOV-2001; 2001US-0332131P.
PR 14-NOV-2001; 2001US-0332240P.
PR 14-NOV-2001; 2001US-0332779P.
PR 21-NOV-2001; 2001US-0332115P.
PR 04-DEC-2001; 2001US-0337621P.
PR 03-JAN-2002; 2002US-0345783P.
PR 16-JAN-2002; 2002US-0350251P.
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PR 02-APR-2002; 2002US-00114270.
XX (CURA-) CURAGEN CORP.
XX GUO X, Kekuda R, Miller CE, Malyankar UM, Spytek KA;
PI Patturajan M, Liu X, Gusev VY, Li L, Vernet CM, Zerhusen BD;
PI Gorman L, Shenoy SG, Pena CEA, Smithson G, Burgess CE, Gerlach V;
PI Padigaru M, Shinkets RA, Gangoli EA, Taupier RJ, Casman SJ, Ji W;
PI Anderson DW, Leite NW, Rastelli L, Edinger SR, Stone DJ;
PI Macdougall JR, Rothenberg ME, Mazur A, Millet I, Peyman JA;
PI Ellerman K;
XX WFI; 2003-046858/04.
XX New isolated NOVX polypeptide useful for treating atherosclerosis,
PT metabolic disorders, diabetes, obesity, infectious disease, anorexia,
PT neurodegenerative disorders, Alzheimer's disease and cancer.
XX Example 83; Page 368; 666pp; English.
XX The invention relates to human polypeptides, termed NOVX, and the
CC polynucleotides encoding them. The polypeptides and polynucleotides are
CC useful for diagnosing disease, and screening for potential therapeutic
CC agents. The sequences are useful for treating metabolic disorders,
CC cardiomyopathy, diabetes, hypertension, congenital heart defects, aortic
CC stenosis, atrial septal defect (ASD), atrioventricular canal defect,
CC ductus arteriosus, pulmonary stenosis, subaortic stenosis, ventricular
CC septal defect (VSD), valve diseases, tuberosus sclerosis, scleroderma,
CC atherosclerosis, obesity, infectious disease, anorexia, neurodegenerative
CC disorders, Alzheimer's disease, Parkinson's disease, immune disorders,
CC haematopoietic disorders, haemophilia, hypercoagulation, Crohn's disease
CC and cancer. This sequence represents a PCR primer used to amplify a human
CC NOVX polynucleotide of the invention
XX
SQ Sequence 22 BP; 9 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

Query Match      0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 6.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 500 TCGGAACCTGGAGACTACAT 620
DB 2 TAGGAATGGAGCCTACAT 22

RESULT 512
ACC80005
ID ACC80005 standard; DNA; 22 BP.
XX AC ACC80005;
XX DT 25-JUL-2003 (first entry);
XX DE Human HDAC9 exon 4 alternative 5' splice donor consensus sequence.
XX KW Human; HDAC9; histone deacetylase 9; enzyme; cytostatic; cancer;
KW leukaemia; ds.
XX OS Homo sapiens.
XX PN WO2003029451-A2.
XX PD 10-APR-2003.
XX PF 02-OCT-2002; 2002WO-GB004455.
XX PR 02-OCT-2001; 2001GB-00023664.
XX (CANC-) CANCER RES INST.
XX (ZELE/) ZELEN A.
XX (PETR/) PETRIE K.
XX (GUID/) GUIDEZ F.
```

PI Zelent A, Petrie K, Guidez F;
XX WPI; 2003-381634/36.
XX
XX New histone deacetylase 9 polypeptide, useful for screening for candidate
PT compounds that share a, bind to, or inhibits the histone deacetylase 9
PT biological activity, and for diagnosing or prognosing cancer, e.g.
PT leukemia.
XX
XX Disclosure; Page 44; 71pp; English.
XX
XX The invention relates to an isolated polypeptide having histone
CC deacetylase (HDAC) activity. Polypeptides and nucleic acids of the
CC invention are useful for screening for candidate compounds that share,
CC bind to, or inhibit histone deacetylase 9 (HDAC9) biological activity,
CC and for diagnosing or prognosing cancer, e.g. leukemia such as TEL-AML1
CC positive and negative pre-B cell acute lymphoblastic leukemia or B cell
CC lymphoma. The current sequence the human HDAC9 exon 4 alternative 5'
CC splice donor consensus sequence
XX
XX Sequence 22 BP; 8 A; 4 C; 8 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 6.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
Qy 2 CGAAGCAGCGTAAGGATGGA 22
Db 2 GGCACGAGGTAAACGATGGA 22
RESULT 513
ID ADA00216/C
XX ADA00216 standard; RNA; 22 BP.
XX
XX
XX ADA00216;
XX
XX 06-NOV-2003 (first entry)
DE Mouse and human miRNA sequence mir-C30 SEQ ID NO:213.
XX
XX Drosophila melanogaster; human; mouse; microRNA; miRNA; cytosolic;
KW gene therapy; diagnostic; therapeutic; developmental modulator;
KW pathogenic modulator; cancer; B-cell chronic leukaemia;
KW tissue reprogramming; ss.
XX
XX Homo sapiens.
OS Mus sp.
XX
XX WO2003029459-A2.
PN
XX
XX
XX 10-APR-2003.
PD
XX
XX 27-SEP-2002; 2002WO-EP010881.
PF
XX
XX 28-SEP-2001; 2001EP-00123453.
PR
XX 22-MAR-2002; 2002EP-0006712.
PR
XX 26-JUL-2002; 2002EP-00016772.
XX
XX (PLAC) MAX PLANCK GES FOERDERUNG.
PA
XX
XX Tuschl T, Lagos-Quintana M, Lendeckel W, Meyer J, Rauhut R;
PI
XX
XX WPI; 2003-381637/36.
DR
XX
XX New nucleic acid molecule for diagnostic and therapeutic applications and
PT as a marker or a modulator of developmental or pathogenic processes, e.g.
PT cancer, comprises microRNAs of a Drosophila melanogaster, a human or a
PT mouse.
XX
XX
XX Claim 1; Page 37; 138pp; English.
PS
XX
XX The present invention describes an isolated nucleic acid molecule (I)

CC comprising a nucleotide sequence of Drosophila melanogaster, human or
CC mouse microRNAs (miRNAs), or their precursors, a complement of it, a
CC nucleotide sequence that has an affinity of at least 80 % to them or a
CC nucleotide sequence that hybridises under stringent conditions to them.
CC Also described: (1) a pharmaceutical composition containing the nucleic
CC acid and, optionally, a carrier; and (2) identifying miRNA molecules or
CC precursor molecules, comprising ligating 5'- and 3'-adapter molecules to
CC the ends of a size-fractionated RNA population, reverse transcribing the
CC adapter-containing RNA population and characterising the reverse
CC transcription products. (I) has cytosolic activity, and can be used in
CC gene therapy. The pharmaceutical composition is useful for diagnostic and
CC therapeutic applications, and as a marker or a modulator of developmental
CC or pathogenic processes, particularly of cancer (e.g. B-cell chronic
CC leukaemia) or gene expression. The miRNA molecules may also be used in
CC tissue reprogramming procedures. The present sequence represents an miRNA
XX
XX Sequence 22 BP; 6 A; 0 C; 10 G; 0 T; 6 U; 0 Other;
SQ
Query Match 0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 6.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
Qy 1482 CCACAACTTCCTGACACTAC 1502
Db 22 CCACACACTTCCTTACATTC 2
RESULT 514
ABX17615
ID ABX17615 standard; DNA; 22 BP.
XX
XX
XX ABX17615;
XX
XX 05-FEB-2003 (first entry)
DT
XX
XX RTQ-PCR primer #1 for human protein NOV27.
DE
XX
XX Human; ss; NOVX; adrenoleukodystrophy; haemophilia; stroke; VHL; PCR;
KW congenital adrenal hyperplasia; haemophilia; hypercoagulation;
KW idiopathic thrombocytopenic purpura; autoimmune disease; allergy;
KW immunodeficiencies; transplantation; Von Hippel-Lindau syndrome;
KW Alzheimer's disease; tuberosus sclerosis; Parkinson's disease; epilepsy;
KW Huntington's disease; cerebral palsy; Leach-Nyhan syndrome; pain;
KW multiple sclerosis; ataxia-telangiectasia; leukodystrophy; anxiety;
KW behavioural disorder; addiction; neuroprotection; diabetes; ARDS;
KW renal artery stenosis; interstitial nephritis; glomerulonephritis;
KW polycystic kidney disease; systemic lupus erythematosus; IGA; primer;
KW renal tubular acidosis; immunoglobulin A nephropathy; hypercalcaemia;
KW cirrhosis; transplantation; asthma; emphysema; scleroderma; GVHD;
KW adult respiratory distress syndrome; graft versus host disease;
KW lymphedema; fertility; pancreatitis; obesity; haemophilia; ulcer;
KW anaemia; cancer; trauma; regeneration; infection; RTQ-PCR;
KW real-time quantitative PCR.
XX
XX Homo sapiens.
OS
XX
XX WO200281629-A2.
PN
XX
XX 17-OCT-2002.
PD
XX
XX 03-APR-2002; 2002WO-US010522.
PF
XX
XX 03-APR-2001; 2001US-0281086P.
PR
XX 03-APR-2001; 2001US-0281136P.
PR
XX 05-APR-2001; 2001US-0281863P.
PR
XX 05-APR-2001; 2001US-0281906P.
PR
XX 06-APR-2001; 2001US-0282020P.
PR
XX 10-APR-2001; 2001US-0282934P.
PR
XX 12-APR-2001; 2001US-0283512P.
PR
XX 19-APR-2001; 2001US-0285325P.
PR
XX 23-APR-2001; 2001US-0285890P.
PR
XX 24-APR-2001; 2001US-0286068P.
PR

25-APR-2001; 2001US-0286292P.
27-APR-2001; 2001US-0287213P.
02-MAY-2001; 2001US-0288257P.
12-MAY-2001; 2001US-0291134P.
17-MAY-2001; 2001US-0291725P.
31-MAY-2001; 2001US-0294771P.
08-JUN-2001; 2001US-0296965P.
18-JUN-2001; 2001US-0299128P.
12-JUL-2001; 2001US-0305063P.
14-NOV-2001; 2001US-0332780P.
04-JAN-2002; 2002US-0345221P.
02-APR-2002; 2002US-00345221.
XX (CURA-) CURAGEN CORP.
XX
XX Spitek KA, Li L, Edinger SR, Ellerman K, Stone DJ, Malyankar UM;
PI Shimkets RA, Guo X, Anderson DW, Patturajan M, Berghs C, Gerlach V;
PI Taupier RJ, Pena CE, Padigara M, Liu Y, Burgess CE, Miller CE;
PI Gusev VV, Kekuda R, Gorman L, Zerhusen BD, Baumgartner JC;
PI Tchiernev VT, Vernet CAM, Smithson G, Heyes MP, Shenoy SG, Liu X;
PI Gangolli EA;
XX
XX WPI; 2003-046863/04.
XX
XX New polypeptides, designated NOVX polypeptides, useful for treating
PT hemophilia, idiopathic thrombocytopenic purpura, autoimmune disease,
PT allergies, transplantation, Alzheimer's disease and stroke.
XX
XX Example C; Page 298; 320pp; English.
XX
XX The invention relates to an isolated NOVX polypeptide selected from NOV1-
CC NOV27 polypeptides, a mature form of NOVX, a variant of NOVX or a
CC fragment of NOVX. Also included are determining the presence or amount of
CC NOVX in a sample (by using an antibody that immunospecifically bind to
CC the polypeptide), determining the presence of or predisposition to
CC disease associated with altered levels of NOVX in a first mammalian
CC subject, identifying a potential therapeutic agent for use in the
CC treatment of pathology related to aberrant expression of physiological
CC interactions of NOVX, screening for a modulator of activity or of latency
CC or predisposition to a pathology associated with NOVX, the nucleic acid
CC encoding NOVX, vectors and host cells. NOVX is useful for identifying an
CC agent (a cellular receptor or downstream effector) that binds to NOVX.
CC NOVX and NOVX nucleic acids are useful for treating or preventing NOVX-
CC associated disorders in humans, and in the manufacture of a medicament
CC for treating a NOVX related disease human disease e.g.
CC adrenoleukodystrophy, congenital adrenal hyperplasia, haemophilia,
CC hypercoagulation, idiopathic thrombocytopenic purpura, autoimmune
CC disease, allergies, immunodeficiencies, transplantation, Von Hippel-
CC Lindau (VHL) syndrome, Alzheimer's disease, stroke, tubular sclerosis,
CC Parkinson's disease, Huntington's disease, cerebellar ataxia, epilepsy,
CC Lesch-Nyhan syndrome, multiple sclerosis, ataxia-telangiectasia,
CC leukodystrophies, behavioural disorders, addiction, anxiety, pain,
CC neuroprotection, diabetes, renal artery stenosis, interstitial nephritis,
CC glomerulonephritis, polycystic kidney disease, systemic lupus
CC erythematosus, renal tubular acidosis, immunoglobulin (Ig) A nephropathy,
CC hypercalcaemia, cirrhosis, transplantation, asthma, emphysema,
CC scleroderma, adult respiratory distress syndrome (ARDS), graft versus
CC host disease (GVHD), lymphedema, fertility, pancreatitis, obesity,
CC haemophilia, ulcers, anaemia, cancer, trauma, regeneration, and viral,
CC bacterial or parasitic infections. The present sequence is a real-time
CC quantitative (RTO)-PCR primer used to determine the tissue specific
CC expression of a NOVX mRNA
XX
XX Sequence 22 BP; 9 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

QY 600 TGGGAACCTGGAGACCTACAT 620
DB 2 TAGGAATGGACGCTACAT 22

RESULT 515
ADC26573
ID ADC26573 standard; DNA; 22 BP.
XX
XX AC ADC26573;
XX
XX 18-DEC-2003 (first entry)
XX
XX PCR primer P1 used to amplify human apolipoprotein E DNA.
XX
XX sickle cell anaemia; beta-thalassaemia; alpha-thalassaemia;
XX phenylketonuria; haemophilia; alpha-anti trypsin deficiency;
XX cystic fibrosis; cancer; plant; animal breeding; PCR; primer; P1; human;
XX apolipoprotein E; ApoE; ss.
XX
XX Homo sapiens.
XX
XX US2003082530-A1.
XX
XX 01-MAY-2003.
XX
XX 05-JUN-1995; 95US-00465322.
XX
XX 16-FEB-1990; 90US-00482005.
XX
XX 15-FEB-1991; 91US-00656575.
XX
XX 02-DEC-1993; 93US-00162376.
XX
XX (SODE/) SODERLUND H E.
XX (SYVA/) SYVANEN A.
XX
XX Soderlund HE, Syvanen A;
XX
XX WPI; 2003-708522/67.
XX
XX Detecting a specific nucleotide variation at a defined site in a target
PT nucleic acid polymer, useful for pre- or postnatal diagnosis of diseases,
PT comprises extending the detection primer using labeled nucleotide
PT triphosphates.
XX
XX Example 1; Page 5; 16pp; English.
XX
XX The invention relates to a novel method for detecting a specific
CC nucleotide variation at a defined site in a target nucleic acid polymer,
CC where a second nucleotide residue replaces the first nucleotide residue,
CC comprising extending the detection primer using a polymerising agent in a
CC mixture containing one or more nucleoside triphosphates (NTPs) and
CC detecting the incorporation of the NTP. The method of the invention may
CC be useful for identifying specific point mutations and genetic
CC variations, such as those associated with sickle cell anaemia, beta- and
CC alpha-thalassaemia, phenylketonuria, haemophilia, alpha-anti trypsin
CC deficiency and cystic fibrosis. Specifically, the method may be used for
CC pre- or postnatal diagnosis of hereditary predispositions or diseases,
CC for the detection of somatic mutations in cancer, for the selection of
CC cells and strains for industrial biotechnology and for plant and animal
CC breeding. The method comprises few and easily performed procedures, thus
CC is especially suited for routine determinations of point mutations and
CC nucleotide variations and allows the quantification of the proportion of
CC mutated cells in a sample as well as the identification of mutations
CC present in as little as 0.5% of the analysed cell population. The current
CC sequence is that of the PCR primer P1 of the invention which was used to
CC amplify human apolipoprotein E (ApoE) DNA.
XX
XX Sequence 22 BP; 9 A; 3 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 6.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1301 AGGAGTTCAAGACATCAACT 1321
DB 2 AGGAGTTCAAGAGGCTCAAAAT 22

RESULT 516
ADD72131
ID ADD72131 standard; DNA; 22 BP.
XX
AC ADD72131;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human NOV1 RTQ PCR set Ag1865 primer #1.
XX
KW Human; ss; PCR; NOVX; endozepine-like protein; metabolic disorder;
KW diabetes; obesity; infectious disease; anorexia; cancer;
KW cardiovascular disease; hypertension; atherosclerosis;
KW neurodegenerative disorder; Alzheimer's disease; Parkinson's disease;
KW epilepsy; immune disorder; osteoarthritis; haematopoietic disorder;
KW inflammatory skin disorder; asthma; dyslipidaemia; neurogenesis;
KW cell differentiation; cell proliferation; haematopoiesis; wound healing;
KW angiogenesis; gene therapy; primer; RTQ-PCR; real time quantitative PCR.
XX
OS Homo sapiens.
XX
PN US2003195149-A1.
XX
PD 16-OCT-2003.
XX
PF 29-NOV-2001; 2001US-00997594.
XX
PR 29-NOV-2000; 2000US-0253934P.
PR 25-JAN-2001; 2001US-0264180P.
PR 20-AUG-2001; 2001US-0313656P.
XX
PA (GANG/) GANGOLLI E A.
PA (STON/) STONE D J.
PI Gangolli EA, Stone DJ;
XX
XX WPI; 2003-844478/78.
XX
XX New isolated NOVX polypeptides and polynucleotides, useful for
XX preventing, diagnosing or treating NOVX-associated disorders, e.g.
XX osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,
XX asthma, or infections.
XX
XX Example 4; SEQ ID NO 18; 89pp; English.
XX
XX The invention relates to an isolated NOVX polypeptide comprising 3 NOV1
XX protein variants (NOV1a, NOV1c and NOV1d) and NOV2 (appearing as
XX ADD72118, ADD72120 and ADD72123, all being endozepine-like proteins); a
XX mature form of NOVX; or a sequence that is at least 95% identical to, or
XX having one or more conservative amino acid substitutions in, the NOVX
XX proteins. Also included are a composition comprising NOVX and a carrier,
XX methods for determining the presence of or predisposition to a disease
XX associated with altered levels of expression of NOVX or NOVX nucleic acid
XX molecule in a first mammalian subject, a method of identifying an agent
XX that binds to NOVX, a method for identifying a potential therapeutic
XX agent for use in the treatment of a pathology which is related to
XX aberrant expression or interactions of NOVX, a method for screening for a
XX modulator of activity or of latency or predisposition to a pathology
XX associated with NOVX, a method for modulating the activity of NOVX,
XX methods of treating or preventing a pathology associated with NOVX, a
XX method for treating a pathological state in a mammal, an isolated nucleic
XX acid molecule encoding NOVX (including their variants), a vector
XX comprising the nucleic acid molecule, a cell comprising the vector, an
XX antibody that binds immunospecifically to NOVX and a method for producing
XX NOVX. The polypeptides, nucleic acid molecules and antibodies are useful
XX in the manufacture of a medicament for treating a syndrome associated
XX with a human disease, preferably a NOVX-associated disorder. The nucleic
XX acid molecules, polypeptides and antibodies are useful for treating,
XX preventing or diagnosing diseases such as metabolic disorders, diabetes,
XX obesity, infectious diseases (viral, bacterial, fungal, helminthic, and
XX protozoal), anorexia, cancer, cardiovascular diseases (hypertension,
XX atherosclerosis), neurodegenerative disorders, Alzheimer's disease,

CC Parkinson's disease, epilepsy, immune disorders (osteoarthritis),
CC haematopoietic disorders, inflammatory skin disorders, asthma, and
CC various dyslipidaemias. The nucleic acids and polypeptides may also be
CC used as targets for the identification of small molecules that modulate
CC or inhibit e.g. neurogenesis, cell differentiation, cell proliferation,
CC haematopoiesis, wound healing and angiogenesis, in gene therapy, in
CC generation of antibodies that bind immunospecifically to NOVX substances
CC for use in therapeutic or diagnostic methods. The nucleic acids are
CC further used as hybridisation probes, in chromosome mapping, tissue
CC typing, preventive medicine, and pharmacogenomics. The present sequence
CC represents an RTQ (real time quantitative) PCR primer used to assay
CC tissue/cell specific expression of NOVX.
XX
SQ Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 6.7e-02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 886 GGGAACATCATCAACATGCAC 906
Db 2 GGCAAAATCATCAACATCAAC 22
RESULT 517
ADD72152
ID ADD72152 standard; DNA; 22 BP.
XX
AC ADD72152;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human NOV2 RTQ PCR set Ag1865 primer #1.
XX
KW Human; ss; PCR; NOVX; endozepine-like protein; metabolic disorder;
KW diabetes; obesity; infectious disease; anorexia; cancer;
KW cardiovascular disease; hypertension; atherosclerosis;
KW neurodegenerative disorder; Alzheimer's disease; Parkinson's disease;
KW epilepsy; immune disorder; osteoarthritis; haematopoietic disorder;
KW inflammatory skin disorder; asthma; dyslipidaemia; neurogenesis;
KW cell differentiation; cell proliferation; haematopoiesis; wound healing;
KW angiogenesis; gene therapy; primer; RTQ-PCR; real time quantitative PCR.
XX
OS Homo sapiens.
XX
PN US2003195149-A1.
XX
PD 16-OCT-2003.
XX
PF 29-NOV-2001; 2001US-00997594.
XX
PR 29-NOV-2000; 2000US-0253934P.
PR 25-JAN-2001; 2001US-0264180P.
PR 20-AUG-2001; 2001US-0313656P.
XX
PA (GANG/) GANGOLLI E A.
PA (STON/) STONE D J.
PI Gangolli EA, Stone DJ;
XX
XX WPI; 2003-844478/78.
XX
XX New isolated NOVX polypeptides and polynucleotides, useful for
XX preventing, diagnosing or treating NOVX-associated disorders, e.g.
XX osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,
XX asthma, or infections.
XX
XX Example 4; SEQ ID NO 39; 89pp; English.
XX
XX The invention relates to an isolated NOVX polypeptide comprising 3 NOV1
XX protein variants (NOV1a, NOV1c and NOV1d) and NOV2 (appearing as
XX ADD72118, ADD72120 and ADD72123, all being endozepine-like proteins); a
XX mature form of NOVX; or a sequence that is at least 95% identical to, or
XX having one or more conservative amino acid substitutions in, the NOVX
XX proteins. Also included are a composition comprising NOVX and a carrier,
XX methods for determining the presence of or predisposition to a disease
XX associated with altered levels of expression of NOVX or NOVX nucleic acid
XX molecule in a first mammalian subject, a method of identifying an agent
XX that binds to NOVX, a method for identifying a potential therapeutic
XX agent for use in the treatment of a pathology which is related to
XX aberrant expression or interactions of NOVX, a method for screening for a
XX modulator of activity or of latency or predisposition to a pathology
XX associated with NOVX, a method for modulating the activity of NOVX,
XX methods of treating or preventing a pathology associated with NOVX, a
XX method for treating a pathological state in a mammal, an isolated nucleic
XX acid molecule encoding NOVX (including their variants), a vector
XX comprising the nucleic acid molecule, a cell comprising the vector, an
XX antibody that binds immunospecifically to NOVX and a method for producing
XX NOVX. The polypeptides, nucleic acid molecules and antibodies are useful
XX in the manufacture of a medicament for treating a syndrome associated
XX with a human disease, preferably a NOVX-associated disorder. The nucleic
XX acid molecules, polypeptides and antibodies are useful for treating,
XX preventing or diagnosing diseases such as metabolic disorders, diabetes,
XX obesity, infectious diseases (viral, bacterial, fungal, helminthic, and
XX protozoal), anorexia, cancer, cardiovascular diseases (hypertension,
XX atherosclerosis), neurodegenerative disorders, Alzheimer's disease,

CC having one or more conservative amino acid substitutions in, the NOVX
CC proteins. Also included are a composition comprising NOVX and a carrier,
CC methods for determining the presence of or predisposition to a disease
CC associated with altered levels of expression of NOVX or NOVX nucleic acid
CC molecule in a first mammalian subject, a method of identifying an agent
CC that binds to NOVX, a method for identifying a potential therapeutic
CC agent for use in the treatment of a pathology which is related to
CC aberrant expression or interactions of NOVX, a method for screening for a
CC modulator of activity or of latency or predisposition to a pathology
CC associated with NOVX, a method for modulating the activity of NOVX,
CC methods of treating or preventing a pathology associated with NOVX, a
CC method for treating a pathological state in a mammal, an isolated nucleic
CC acid molecule encoding NOVX (including their variants), a vector
CC comprising the nucleic acid molecule, a cell comprising the vector, an
CC antibody that binds immunospecifically to NOVX and a method for producing
CC NOVX. The polypeptides, nucleic acid molecules and antibodies are useful
CC in the manufacture of a medicament for treating a syndrome associated
CC with a human disease, preferably a NOVX-associated disorder. The nucleic
CC acid molecules, polypeptides and antibodies are useful for treating,
CC preventing or diagnosing diseases such as metabolic disorders, diabetes,
CC obesity, infectious diseases (viral, bacterial, fungal, helminthic, and
CC protozoal), anorexia, cancer, cardiovascular diseases (hypertension,
CC atherosclerosis), neurodegenerative disorders, Alzheimer's disease,
CC Parkinson's disease, epilepsy, immune disorders (osteoarthritis),
CC haematopoietic disorders, inflammatory skin disorders, asthma, and
CC various dyslipidaemias. The nucleic acids and polypeptides may also be
CC used as targets for the identification of small molecules that modulate
CC or inhibit e.g. neurogenesis, cell differentiation, cell proliferation,
CC haematopoiesis, wound healing and angiogenesis, in gene therapy, in
CC generation of antibodies that bind immunospecifically to NOVX substances
CC for use in therapeutic or diagnostic methods. The nucleic acids are
CC further used as hybridisation probes, in chromosome mapping, tissue
CC typing, preventive medicine, and pharmacogenomics. The present sequence
CC represents an RTQ (real time quantitative) PCR primer used to assay
CC tissue/cell specific expression of NOVX.

XX
SQ Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 6.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 886 GGGACATCATCAACATGCAC 906
DB 2 GGCACATCATCAACATCAAC 22

RESULT 518
ADD72164

ID ADD72164 standard; DNA; 22 BP.

XX AC ADD72164;

XX DT 29-JAN-2004 (first entry)

XX DE Human NOV2 RTQ PCR set Ag2029 primer #1.

XX KW Human; ss; PCR; NOVX; endoepine-like protein; metabolic disorder;
KW diabetes; obesity; infectious disease; anorexia; cancer;
KW cardiovascular disease; hypertension; atherosclerosis;
KW neurodegenerative disorder; Alzheimer's disease; Parkinson's disease;
KW epilepsy; immune disorder; osteoarthritis; haematopoietic disorder;
KW inflammatory skin disorder; asthma; dyslipidaemia; neurogenesis;
KW cell differentiation; cell proliferation; haematopoiesis; wound healing;
KW angiogenesis; gene therapy; primer; RTQ-PCR; real time quantitative PCR.

XX OS Homo sapiens.

XX PN US2003195149-A1.

XX PD 16-OCT-2003.

XX PD 29-NOV-2001; 2001US-00997594.

XX 29-NOV-2000; 2000US-0253834P.
PR 25-JAN-2001; 2001US-0264180P.
PR 20-AUG-2001; 2001US-0313656P.
XX (GANG/) GANGOLLI E A.
PA (STON/) STONE D J.
XX Gangolli EA, Stone DU;
XX MPI; 2003-844478/78.
XX New isolated NOVX polypeptides and polynucleotides, useful for
PT preventing, diagnosing or treating NOVX-associated disorders, e.g.
PT osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,
PT asthma, or infections.
XX Example 4; SEQ ID NO 51; 89pp; English.
XX The invention relates to an isolated NOVX polypeptide comprising 3 NOV1
CC protein variants (NOV1a, NOV1c and NOV1d) (appearing as
CC ADD72118, ADD72120 and ADD72123, all being endopeptin-like proteins); a
CC mature form of NOVX; or a sequence that is at least 95% identical to, or
CC having one or more conservative amino acid substitutions in, the NOVX
CC proteins. Also included are a composition comprising NOVX and a carrier,
CC methods for determining the presence of or predisposition to a disease,
CC associated with altered levels of expression of NOVX or NOVX nucleic acid
CC molecule in a first mammalian subject, a method of identifying an agent
CC that binds to NOVX, a method for identifying a potential therapeutic
CC agent for use in the treatment of a pathology which is related to
CC aberrant expression or interactions of NOVX, a method for screening for a
CC modulator of activity or of latency or predisposition to a pathology
CC associated with NOVX, a method for modulating the activity of NOVX, a
CC method of treating or preventing a pathology associated with NOVX, a
CC acid molecule encoding NOVX (including their variants), a vector
CC comprising the nucleic acid molecule, a cell comprising the vector, an
CC antibody that binds immunospecifically to NOVX and a method for producing
CC NOVX. The polypeptides, nucleic acid molecules and antibodies are useful
CC in the manufacture of a medicament for treating a syndrome associated
CC with a human disease, preferably a NOVX-associated disorder. The nucleic
CC acid molecules, polypeptides and antibodies are useful for treating,
CC preventing or diagnosing diseases such as metabolic disorders, diabetes,
CC obesity, infectious diseases (viral, bacterial, fungal, helminthic, and
CC protozoal), anorexia, cancer, cardiovascular diseases (hypertension,
CC atherosclerosis), neurodegenerative disorders, Alzheimer's disease,
CC Parkinson's disease, epilepsy, immune disorders (osteoarthritis),
CC haematopoietic disorders, inflammatory skin disorders, asthma, and
CC various dyslipidaemias. The nucleic acids and polypeptides may also be
CC used as targets for the identification of small molecules that modulate
CC or inhibit e.g. neurogenesis, cell differentiation, cell proliferation,
CC haematopoiesis, wound healing and angiogenesis, in gene therapy, in
CC generation of antibodies that bind immunospecifically to NOVX substances
CC for use in therapeutic or diagnostic methods. The nucleic acids are
CC further used as hybridisation probes, in chromosome mapping, tissue
CC typing, preventive medicine, and pharmacogenomics. The present sequence
CC represents an RTQ (real time quantitative) PCR primer used to assay
CC tissue/cell specific expression of NOVX.

XX
SQ Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 6.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 886 GGGACATCATCAACATGCAC 906
DB 2 GGCACATCATCAACATCAAC 22

RESULT 519
ADD72146

ID ADD72146 standard; DNA; 22 BP.

CC ADD72146;
XX 29-JAN-2004 (first entry)
XX Human NOV1 RTQ PCR set Ag2029 primer #1.
DE Human; ss; PCR; NOVX; endozepine-like protein; metabolic disorder;
KW diabetes; obesity; infectious disease; anorexia; cancer;
KW cardiovascular disease; hypertension; atherosclerosis;
KW neurodegenerative disorder; Alzheimer's disease; Parkinson's disease;
KW epilepsy; immune disorder; osteoarthritis; haematopoietic disorder;
KW inflammatory skin disorder; asthma; dyslipidaemia; neurogenesis;
KW cell differentiation; cell proliferation; haematopoiesis; wound healing;
KW angiogenesis; gene therapy; primer; RTQ-PCR; real time quantitative PCR.
XX OS Homo sapiens.
XX US2003195149-A1.
XX 16-OCT-2003.
XX 29-NOV-2001; 2001US-00997594.
XX 29-NOV-2000; 2000US-0253834P.
XX 25-JAN-2001; 2001US-0284180P.
XX 20-AUG-2001; 2001US-0313656P.
XX (GANG/) GANGOLLI E A.
XX (STON/) STONE D J.
XX Gangolli EA, Stone DJ;
XX WPI; 2003-844478/78.
XX New isolated NOVX polypeptides and polynucleotides, useful for
XX preventing, diagnosing or treating NOVX-associated disorders, e.g.
XX osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,
XX asthma, or infections.
XX Example 4; SEQ ID NO 33; 89pp; English.
XX The invention relates to an isolated NOVX polypeptide comprising 3 NOV1
XX protein variants (NOV1a, NOV1c and NOV1d) and NOV2 (appearing as
XX ADD72118, ADD72120 and ADD72123, all being endozepine-like proteins); a
XX mature form of NOVX; or a sequence that is at least 95% identical to, or
XX having one or more conservative amino acid substitutions in, the NOVX
XX proteins. Also included are a composition comprising NOVX and a carrier,
XX methods for determining the presence of or predisposition to a disease
XX associated with altered levels of expression of NOVX or NOVX nucleic acid
XX molecule in a first mammalian subject, a method of identifying an agent
XX that binds to NOVX, a method for identifying a potential therapeutic
XX agent for use in the treatment of a pathology which is related to
XX aberrant expression or interactions of NOVX, a method for screening for a
XX modulator of activity or of latency or predisposition to a pathology
XX associated with NOVX, a method for modulating the activity of NOVX,
XX methods of treating or preventing a pathology associated with NOVX, a
XX method for treating a pathological state in a mammal, an isolated nucleic
XX acid molecule encoding NOVX (including their variants), a vector
XX comprising the nucleic acid molecule, a cell comprising the vector, an
XX antibody that binds immunospecifically to NOVX and a method for producing
XX NOVX. The polypeptides, nucleic acid molecules and antibodies are useful
XX in the manufacture of a medicament for treating a syndrome associated
XX with a human disease, preferably a NOVX-associated disorder. The nucleic
XX acid molecules, polypeptides and antibodies are useful for treating,
XX preventing or diagnosing diseases such as metabolic disorders, diabetes,
XX obesity, infectious diseases (viral, bacterial, fungal, helminthic, and
XX protozoal), anorexia, cancer, cardiovascular diseases (hypertension, and
XX atherosclerosis), neurodegenerative disorders, Alzheimer's disease,
XX Parkinson's disease, epilepsy, immune disorders (osteoarthritis),
XX haematopoietic disorders, inflammatory skin disorders, asthma, and
XX various dyslipidaemias. The nucleic acids and polypeptides may also be
XX used as targets for the identification of small molecules that modulate

CC or inhibit e.g. neurogenesis, cell differentiation, cell proliferation,
CC haematopoiesis, wound healing and angiogenesis in gene therapy in
CC generation of antibodies that bind immunospecifically to NOVX substances
CC for use in therapeutic or diagnostic methods. The nucleic acids are
CC further used as hybridisation probes, in chromosome mapping, tissue
CC typing, preventive medicine, and pharmacogenomics. The present sequence
CC represents an RTQ (real time quantitative) PCR primer used to assay
CC tissue/cell specific expression of NOVX.
XX SQ Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 6.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 886 GGGAAATCATCATCAATGCAC 906
DB 2 GGGAAATCATCATCAATCAAC 22
RESULT 520
ADD00034
ID ADD00034 standard; DNA; 16 BP.
XX AC ADD00034;
XX 01-JAN-2004 (first entry)
XX Stage 2 MSP primer beta-BSM3 used to analyse human PAX5 sequence.
XX aberrant promoter methylation; PAX5 alpha; beta; breast; lung;
XX colon cancer; human; ss; primer; PCR; beta-BSM3.
XX Homo sapiens.
XX WO2003064682-A1.
XX 07-AUG-2003.
XX 18-OCT-2002; 2002WO-US033499.
XX 18-OCT-2001; 2001US-0348407P.
XX (LOVE-) LOVEFACE RESPIRATORY RES INST.
XX Palmisano WA, Belinsky SA;
XX WPI; 2003-618364/58.
XX Detecting aberrant promoter methylation associated with a predisposition
XX to cancers of the breast, lung and colon in a human, useful for
XX diagnosing or monitoring cancer, comprises detecting methylation of the
XX PAX5 alpha or beta gene.
XX Disclosure; Page 6; 31pp; English.
XX The invention relates to a novel method for detecting aberrant promoter
XX methylation associated with predisposition to cancers of the breast, lung
XX and colon in a human comprising detecting methylation of the PAX5 alpha
XX or beta gene. The method of the invention may be useful in screening for,
XX monitoring or diagnosing human cancer, particularly breast, lung or colon
XX cancer. The current sequence is that of the stage 2 MSP (methylation
XX specific PCR) primer beta-BSM3 of the invention used to analyse the human
XX PAX5 sequence.
XX SQ Sequence 16 BP; 0 A; 9 C; 6 G; 1 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 16;
Best Local Similarity 93.8%; Pred. No. 5.3e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 560 GCCGCGCGCTCCGTCG 575
|||||

IgA; constant heavy region; cell surface; lung fibroblast cell line; primer; PCR; amplification; probe; isoform; splicing site; antibody; post-transcriptional processing; prophylaxis; infectious disease; allergy; immunodeficiency disease; ds.

Synthetic.

US5484907-A.

16-JAN-1996.

22-OCT-1993; 93US-00140721.

21-JUN-1989; 89US-00369479.

22-DEC-1989; 89US-00455080.

16-SEP-1991; 91US-00760765.

20-JUL-1993; 93US-00095068.

(TANO-) TANOX BIOSYSTEMS INC.

Chang NT, Chang TW;

WPI; 1996-087117/09.

Oligo-nucleotide(s) corresponding to human IgA segments - comprising membrane anchoring extracellular peptide segments, used to develop prods. for therapy and diagnosis.

Example 1; Col 15; 12pp; English.

The primers AAT10550-1 were used to amplify the genomic inserts from phages contg. sequences encoding the alpha-1 and alpha-2 isoforms of the membrane anchoring peptide from a human IgA. This primer is based on sequence located in the intron, about 1 kb downstream from the constant heavy chain region 3 exon. The phages were isolated from a human lung fibroblast line library in the phage FIX, using the probe AAT10549. The sequences encoding the extracellular portion of the membrane anchoring peptide (AAR88191) can be used to raise antibodies against the IgA membrane extracellular peptide which can modulate IgA synthesis, esp. to increase their prodn. The peptides and antibodies can be used to treat or in the prophylaxis of infectious diseases, allergies and immunodeficiency diseases. (Updated on 25-MAR-2003 to correct PF field.)

Sequence 17 BP; 2 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 17;

Best Local Similarity 93.8%; Pred. No. 5.6e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1273 GAGACGTGGCCAGGCA 1288

DB 17 GAGACTTGGCCAGGCA 2

RESULT 523

AAV94784

ID AAV94784 standard; RNA; 17 BP.

XX

AC AAV94784;

XX

DT 24-FEB-1999 (first entry)

XX

DE Human IL-2 receptor g-chain substrate position 1330.

XX

KW Human; IL-2 receptor g-chain; interleukin 2 receptor gamma chain;

KW hammerhead ribozyme; hairpin ribozyme; substrate; expression; cancer;

KW autoimmune disease; psoriasis; allergy; inflammatory disease;

XX graft rejection; ss.

OS Homo sapiens.

XX

PN WO9824913-A2.

XX

1 GCCGCCGCCGCCGTG 16

RESULT 521

AAQ78692/c

ID AAQ78692 standard; DNA; 17 BP.

XX

AC AAQ78692;

XX

DT 25-MAR-2003 (revised)

DT 24-JUN-1995 (first entry)

XX

DE DNA primer for human IgA membrane anchor.

XX

XX

KW Primer; IgA membrane anchor; IgA epitope; monoclonal antibody;

KW therapeutic; ds.

XX

OS Homo sapiens.

XX

PN US5362643-A.

XX

PD 08-NOV-1994.

XX

PF 20-JUL-1993; 93US-00095068.

XX

XX

PR 21-JUN-1989; 89US-00369479.

PR

PR 22-DEC-1989; 89US-00455080.

PR

PR 16-SEP-1991; 91US-00760765.

XX

XX

PA (TANO-) TANOX BIOSYSTEMS.

XX

XX

Chang TW;

PI

XX

WPI; 1994-357359/44.

DR

XX

New antibodies specific for membrane bound IgA - and hybridomas producing them, used to increase IgA prodn., partic. in patients with infectious disease or allergy.

PT

PT

XX

XX

Disclosure; Page 9; 12pp; English.

PS

XX

The primer is used in a polymerase chain reaction amplification of DNA segments from a human lung fibroblast line (WI38) phage library containing alpha-1 or alpha-2 gene segments of the human IgA membrane-anchoring extracellular peptide. This segment is used to induce the formation of monoclonal antibodies which modulate (increase) IgA synthesis. The IgA can be used in the treatment of patients subject to infectious diseases or suffering from allergy. (Updated on 25-MAR-2003 to correct PF field.)

XX

XX

Sequence 17 BP; 2 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 17;

Best Local Similarity 93.8%; Pred. No. 5.6e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1273 GAGACGTGGCCAGGCA 1288

DB 17 GAGACTTGGCCAGGCA 2

RESULT 522

AAT10550/c

ID AAT10550 standard; DNA; 17 BP.

XX

AC AAT10550;

XX

DT 25-MAR-2003 (revised)

DT 18-JUL-1996 (first entry)

XX

XX

DE Human IgA membrane anchoring extracellular peptide segment primer #1.

XX

XX

Exon; membrane anchoring extracellular peptide; human; immunoglobulin;

KW

PD 11-JUN-1998.
XX
PF 02-DEC-1997; 97WO-US021748.
XX
PR 03-DEC-1996; 96US-00758306.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Stinchcomb DT, Mcswiggen JA;
XX
DR WPI; 1998-333332/29.
XX
XX Ribozymes targetted to interleukin 2 - useful for treating e.g. cancer,
PT autoimmune disease and allergies.
XX
XX Claim 4; Page 37; 61pp; English.
XX
CC The present sequence invention describes ribozymes targetted to modulate
CC the synthesis and/or expression of interleukin (IL)-2R gamma encoded RNA.
CC AAV93889 to AAV94574 represent specifically claimed ribozymes, and
CC AAV94575 to AAV95260 represent specifically claimed substrate sequences
CC from the present invention. The ribozymes can be used for the treatment
CC of, e.g. graft rejection, autoimmune disease, cancer, psoriasis, allergy
CC and other inflammatory conditions. The ribozymes are also used to induce
CC tolerance in a recipient to alloantigen from a donor
XX
XX Sequence 17 BP; 1 A; 7 C; 3 G; 0 T; 6 U; 0 Other;
SQ
Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 56.2%; Pred. No. 5.6e+02;
Matches 9; Conservative 6; Mismatches 1; Indels 0; Gaps 0;
QY 1456 TTCTTCCTCAGTCGG 1471
DB 1 UUCUCCUCCAGUCUGG 16
RESULT 524
AAT86543/c
ID AAT86543 standard; DNA; 17 BP.
XX
AC AAT86543;
XX
DT 25-MAR-2003 (revised)
DT 20-MAR-1998 (first entry)
XX
DE Membrane extracellular peptide fragment of immunoglobulin primer.
XX
KW Membrane bound; immunoglobulin A; anti-IgA antibody; immunogen;
KW B-cell leukemia; lymphoma; IGA-mediated nephropathy; diagnosis; PCR;
KW primer; probe; ss.
XX
OS Homo sapiens.
XX
PN US5690934-A.
XX
PD 25-NOV-1997.
XX
PF 20-MAR-1996; 96US-00619790.
XX
PR 31-DEC-1987; 87US-00140036.
PR 29-JUL-1988; 88US-00226421.
PR 05-AUG-1988; 88US-00229178.
PR 16-NOV-1988; 88US-00272243.
PR 21-JUN-1989; 89US-00369479.
PR 21-JUN-1989; 89US-00369625.
PR 22-DEC-1989; 89US-00455080.
PR 23-JAN-1990; 90US-00468766.
PR 27-APR-1990; 90US-00515604.
PR 16-SEP-1991; 91US-00760765.
PR 09-OCT-1992; 92US-00973321.
PR 09-JUL-1993; 93US-00090527.
PR 20-JUL-1993; 93US-00095068.

PR 14-OCT-1993; 93US-00137253.
PR 22-OCT-1993; 93US-00140721.
PR 11-JAN-1994; 94US-00180145.
PR 26-MAY-1994; 94US-00249558.
XX
XX (TANO-) TANOX BIOSYSTEMS INC.
XX
XX Chang TW, Chang NT;
PI
XX WPI; 1998-017568/02.
DR
XX Peptide fragments of human membrane-bound immunoglobulin A - for
PT generating anti-IgA antibodies, useful for treatment of B-cell
PT leukaemia(s) or lymphoma(s) or IGA-mediated nephropathy.
XX
XX Example 1; Col 11-12; 10pp; English.
XX
CC PCR primers AAT86543-4 were used to amplify genomic DNA segments from the
CC purified DNA of positive clones identified by the probe AAT86542. An
CC oligonucleotide probe (AAT86542) which corresponds to a segment located
CC in the CH3 coding region of immunoglobulin allotype alpha1 and alpha2 and
CC was synthesized and used as a probe to screen phage clones containing oil
CC or alpha2 gene segments. The library was constructed using genomic DNA
CC from human lung fibroblast line, WI38, packaged in phage FIX. Primer
CC AAT86543 is located in the intron about 1kb downstream from CH3 exon and
CC primer AAT86544 is a very conservative segment in the mouse alpha
CC membrane exon. The invention relates to a unique extracellular peptide
CC segment present on B cell-bound but not secreted IGA. These extracellular
CC peptide segments form, entirely or in part, antigenic epitopes unique to
CC membrane bound but not secreted IGA, and thereby provide a unique epitope
CC on the IGA-bearing B cells to which membrane bound IGA is attached. These
CC peptide segments can be used as immunogens to generate antibodies which
CC specifically target membrane-bound IGA and IGA-bearing B cells. (Updated
CC on 25-MAR-2003 to correct PR field.)
XX
XX Sequence 17 BP; 2 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 5.6e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1273 GAGACGTGGCCAGGCA 1288
DB 17 GAGACTGGCCAGGCA 2
RESULT 525
ABK03441/c
ID ABK03441 standard; RNA; 17 BP.
XX
AC ABK03441;
XX
DT 12-MAR-2002 (first entry)
DT
XX Human CD20 G-cleaver #56.
XX
XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW DNazyme; inozyme; G-cleaver; amberyne; zinzyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytooma; IMC; immune thrombocytopaenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jacob disease; muscular dystrophy; neurodegenerative disease.
OS Homo sapiens.
OS Synthetic.
PN WO200159103-A2.

XX		24-JAN-2002	(first entry)
DT		HBA2 mutation correcting oligonucleotide SEQ ID NO: 2930.	
XX			
XX			
XX			
KW	Human; Gene therapy; adenosine deaminase deficiency; p53; beta-globin;		
KW	retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; Cancer; Factor V;		
KW	cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;		
KW	adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosia;		
KW	haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLR1; APOE;		
KW	mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;		
KW	familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;		
KW	UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;		
KW	Alzheimer's disease; cytostatic; antileukemic; ss.		
XX			
OS	Homo sapiens.		
XX			
PN	WO200173002-A2.		
PD			
PP	04-OCT-2001.		
XX			
XX	27-MAR-2001; 2001WO-US009761.		
PR			
XX	27-MAR-2000; 2000US-0192176P.		
PR	27-MAR-2000; 2000US-0192179P.		
PR	01-JUN-2000; 2000US-020838P.		
PR	30-OCT-2000; 2000US-0244989P.		
XX			
XX	(UYDE) UNIV DELAWARE.		
PA			
XX			
PI	Kmiec EB, Gamper HB, Rice MC;		
DR	WPI; 2001-639230/73.		
XX			
PPT	Oligonucleotide for targeted alterations of genetic sequences and for		
PPT	treating cystic fibrosis, comprises at least one mismatch and chemical		
PT	modification.		
XX			
PS	Claim 7; Page 207; 294pp; English.		
CC	The present invention provides single-stranded oligonucleotides which can		
CC	be used for the targeted alteration of genomic sequences, where the		
CC	oligonucleotide has at least one mismatch compared with the genomic		
CC	sequence to be altered. In particular, these sequences are directed at		
CC	the following genes: adenosine deaminase, p53, beta-globin,		
CC	retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A		
CC	(CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus		
CC	1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,		
CC	apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase		
CC	(UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and		
CC	presenilin-2 (PSEN2). These can be used in the gene therapy of diseases		
CC	such as cancer, adenosine deaminase deficiency, cystic fibrosis,		
CC	haemophilia, hypercholesterolaemia, thalassemia, sickle cell anaemia,		
CC	Alzheimer's disease, melanoma, adenomatous polyposis of the colon and		
CC	various syndromes. The present sequence is one of the gene correcting		
XX	oligonucleotides of the invention		
SQ	Sequence 17 BP; 3 A; 6 C; 5 G; 3 T; 0 U; 0 Other;		
	Query Match 0.8%; Score 14.4; DB 1; Length 17;		
	Best Local Similarity 93.8%; Pred. No. 5.6e+02;		
	Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;		
QY	1631 CCACGAGGCAGCGGCT 1646		
DB	17 CCACGAGGCAGTGCT 2		
RESULT 527			
ABA80085			
ID ABA80085 standard; DNA; 17 BP.			
XX			

AC ABA80085;
 XX
 DT 24-JAN-2002 (first entry)
 XX
 DE HBA2 mutation correcting oligonucleotide SEQ ID NO: 2931.
 XX
 KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
 KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
 KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
 KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
 KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
 KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
 KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
 KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
 KW Alzheimer's disease; cytosstatic; antickling; antianaemic; haemostatic;
 KW antileptic; ss.
 XX
 OS Homo sapiens.
 XX
 WO200173002-A2.
 PN
 XX
 PD 04-OCT-2001.
 XX
 PF 27-MAR-2001; 2001WO-US009761.
 XX
 PR 27-MAR-2000; 2000US-0192176P.
 PR 27-MAR-2000; 2000US-0192179P.
 PR 01-JUN-2000; 2000US-0208538P.
 PR 30-OCT-2000; 2000US-0244989P.
 XX
 PA (UYDE) UNIV DELAWARE.
 XX
 XX Kmiec EB, Gamper HB, Rice MC;
 XX
 DR WPI; 2001-639230/73.
 XX
 PT Oligonucleotide for targeted alterations of genetic sequences and for
 PT treating cystic fibrosis, comprises at least one mismatch and chemical
 PT modification.
 XX
 PS Claim 7; Page 207; 294pp; English.
 XX
 CC The present invention provides single-stranded oligonucleotides which can
 CC be used for the targeted alteration of genomic sequences, where the
 CC oligonucleotide has at least one mismatch compared with the genomic
 CC sequence to be altered. In particular, these sequences are directed at
 CC the following genes: adenosine deaminase, p53, beta-globin,
 CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
 CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
 CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
 CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
 CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
 CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
 CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
 CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
 CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
 CC various syndromes. The present sequence is one of the gene correcting
 CC oligonucleotides of the invention
 XX
 SQ Sequence 17 BP; 3 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 93.8%; Pred. No. 5.6e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1631 CCAGCAGGCGGCGT 1646
 DB 1 CCAGCAGGCGGCGT 16
 RESULT 528
 AAC83038/c
 ID AAC83038 standard; DNA; 17 BP.

XX AAC83038;
 AC
 XX 22-FEB-2001 (first entry)
 DT
 XX
 DE Primer #3 used to isolate dog beta-galactosidase cDNA.
 XX
 KW Portuguese Water dog; beta galactosidase; R60H; GM1-gangliosidosis;
 KW primer: ss.
 XX
 OS Canis familiaris.
 XX
 US6140115-A.
 PN
 XX 31-OCT-2000.
 PD
 XX 09-NOV-1999; 99US-00436605.
 PF
 XX 09-NOV-1999; 99US-00436605.
 PR
 XX (KOLO/) KOLODNY E H.
 PA (WANG/) WANG Z.
 PA (RAGH/) RAGHAVAN S.
 PA (ZENG/) ZENG B.
 XX
 PI Kolodny EH, Wang Z, Raghavan S, Zeng B;
 XX
 DR WPI; 2001-006329/01.
 XX
 PT New beta-galactosidase gene isolated from Canis familiaris, useful for
 PT screening R60H mutation of acid beta-galactosidase, or for screening
 PT Portuguese Water dogs to eliminate carriers of GM1-gangliosidosis from
 PT breeding programs.
 XX
 XX Example 4; Col 10; 27pp; English.
 PS
 CC The present invention relates to canine beta-galactosidase. The cDNA
 CC molecule and kit are useful for screening the R60H mutation of acid beta-
 CC galactosidase. The cDNA molecule is also useful for screening Portuguese
 CC Water dogs to eliminate carriers of GM1-gangliosidosis from breeding
 CC programs
 XX
 SQ Sequence 17 BP; 2 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 93.8%; Pred. No. 5.6e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 41 CAGGAGGACCGCAGT 56
 DB 17 CAGGATGACCGCAGT 2
 RESULT 529
 AAF91027/c
 ID AAF91027 standard; DNA; 17 BP.
 XX
 AC AAF91027;
 XX
 DT 04-MAY-2001 (first entry)
 XX
 DE Human multi drug resistance-1 gene related sequence SEQ ID NO: 114.
 XX
 KW Human; MDR-1; multi drug resistance-1; drug uptake; disease; cancer;
 KW inflammatory disease; neuronal disease; CNS disease;
 KW cardiovascular disease; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 WO200109183-A2.
 PN
 XX 08-FEB-2001.
 PD
 XX

```
PF 28-JUL-2000; 2000WO-EF007314.
XX
XX
PR 30-JUL-1999; 99EP-00114938.
PR 22-FEB-2000; 2000EP-00103361.
XX
XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
XX Brinkmann U, Hoffmeyer S, Eichelbaum M, Roots I;
XX
XX WPI; 2001-159855/16.
XX
XX New polynucleotide encoding a molecular variant Multi Drug Resistance
PT (MDR)-1 polypeptide is useful for diagnosing and treating diseases
PT associated with abnormal MDR-1 expression or function, e.g. cancer.
XX
XX Claim 36; Page 100; 154pp; English.
XX
XX The present invention provides nucleotides encoding molecular variants of
CC the human multi drug resistance-1 (MDR-1) protein. These can be used to
CC identify compounds capable of treating multidrug resistance and
CC sensitivity interfering resulting from polymorphisms in MDR-1, which can
CC lead to difficulties in treating cancer, cardiovascular, neuronal,
CC inflammatory and CNS diseases
XX
XX Sequence 17 BP; 5 A; 5 C; 3 G; 4 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. NO. 5.6e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 52 GCAGTGTGACTGCTGA 67
Db |||||
16 GCAATGTGACTGCTGA 1
RESULT 530
ABV78818/c
ID ABV78818 standard; DNA; 17 BP.
XX
XX AC ABV78818;
XX
XX 03-JAN-2003 (first entry)
XX
XX Human HTPL scanning oligonucleotide SEQ ID 64.
XX
XX Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
XX human testis expressed Patched like protein; testis; adrenal; liver;
XX male germ cell development; bone marrow; brain; kidney; lung; placenta;
XX prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX
XX Homo sapiens.
XX
XX EP1229046-A2.
XX
XX 07-AUG-2002.
XX
XX 28-JAN-2002; 2002EP-00001167.
XX
XX 30-JAN-2001; 2001WO-US000663.
XX
XX 30-JAN-2001; 2001WO-US000664.
XX
XX 30-JAN-2001; 2001WO-US000665.
XX
XX 30-JAN-2001; 2001WO-US000667.
XX
XX 30-JAN-2001; 2001WO-US000668.
XX
XX 30-JAN-2001; 2001WO-US000669.
XX
XX 23-MAY-2001; 2001US-00864761.
XX
XX 09-OCT-2001; 2001US-0327898P.
XX
XX (AEOM-) AEOMICA INC.
XX
XX Zhan J;
XX
XX WPI; 2002-676582/73.
XX
XX
```

```
PT Novel isolated human testis expressed Patched like protein (HTPL), useful
PT for identifying agonist and antagonist and specific binding partners, and
PT for treating subjects having defects in HTPL.
XX
XX Example 2; Page 72; 718pp; English.
XX
XX The present invention relates to human testis expressed Patched like
CC protein (HTPL, see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL
CC has two isoforms, with a few single base pair differences between the
CC two. One of the single base pair changes introduces a premature stop
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC shares an overall structure organisation with the Patched protein. The
CC shared structural features strongly imply that HTPL plays a role similar
CC to that of Patched, and is a potential tumour suppressor. HTPL is
CC important in regulating male germ cell development, and the HTPL gene was
CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are
CC useful for diagnosing a disorder caused by mutation in HTPL, and in
CC therapy and manufacture of a medicament for treatment or prevention of
CC such disorder associated with decreased expression or activity of human
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC clinically useful diagnostic markers and potential therapeutic agents for
CC male infertility and cancer. The present oligonucleotide was used in an
CC example from the invention
XX
XX Sequence 17 BP; 0 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. NO. 5.6e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 40 GCAGGAGGACACGACGAG 55
Db |||||
16 GCAGGAGGACACGACGAG 1
RESULT 531
ABV78817/c
ID ABV78817 standard; DNA; 17 BP.
XX
XX AC ABV78817;
XX
XX 03-JAN-2003 (first entry)
XX
XX Human HTPL scanning oligonucleotide SEQ ID 63.
XX
XX Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
XX human testis expressed Patched like protein; testis; adrenal; liver;
XX male germ cell development; bone marrow; brain; kidney; lung; placenta;
XX prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX
XX Homo sapiens.
XX
XX EP1229046-A2.
XX
XX 07-AUG-2002.
XX
XX 28-JAN-2002; 2002EP-00001167.
XX
XX 30-JAN-2001; 2001WO-US000663.
XX
XX 30-JAN-2001; 2001WO-US000664.
XX
XX 30-JAN-2001; 2001WO-US000665.
XX
XX 30-JAN-2001; 2001WO-US000667.
XX
XX 30-JAN-2001; 2001WO-US000668.
XX
XX 30-JAN-2001; 2001WO-US000669.
XX
XX 23-MAY-2001; 2001US-00864761.
XX
XX 09-OCT-2001; 2001US-0327898P.
XX
XX (AEOM-) AEOMICA INC.
XX
XX Zhan J;
XX
XX WPI; 2002-676582/73.
XX
XX
```

DR WPI; 2002-676582/73.

XX Novel isolated human testis expressed Patched like protein (HTPL), useful

PT for identifying agonist and antagonist and specific binding partners, and

PT for treating subjects having defects in HTPL.

XX

PS Example 2; Page 72; 718pp; English.

XX

CC The present invention relates to human testis expressed Patched like

CC protein (HTPL, see ABV78759 to ASV78762 and ABB98519 to ABB98520). HTPL

CC has two isoforms, with a few single base pair differences between the

CC two. One of the single base pair changes introduces a premature stop

CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL

CC shares an overall structure organisation with the Patched protein. The

CC shared structural features strongly imply that HTPL plays a role similar

CC to that of Patched, and is a potential tumour suppressor. HTPL is

CC important in regulating male germ cell development, and the HTPL gene was

CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are

CC useful for diagnosing a disorder caused by mutation in HTPL, and in

CC therapy and manufacture of a medicament for treatment or prevention of

CC such disorder associated with decreased expression or activity of human

CC HTPL. Such disorders include disorders of testis, or adrenal, adult and

CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,

CC skeletal muscle or colon function. HTPL proteins and nucleic acids are

CC clinically useful diagnostic markers and potential therapeutic agents for

CC male infertility and cancer. The present oligonucleotide was used in an

CC example from the invention

XX

QQ Sequence 17 BP; 0 A; 8 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 17;

Best Local Similarity 93.8%; Pred. No. 5.6e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 40 GCAGGAGGACACGAGCAG 55

DB 17 GCAGGAGGACACGAGCAG 2

RESULT 532

ABK18807

ID ABK18807 standard; RNA; 17 BP.

AC ABK18807;

XX

DT 09-APR-2002 (first entry)

DE Human ERG DNAzyme target sequence Seq ID No 1454.

XX

KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;

KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;

KW vulvar; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;

KW tumour angiogenesis; diabetic retinopathy; macular degeneration;

KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;

KW angiofibroma of tuberosus sclerosus; port-wine stain; wound healing;

KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;

KW amberzyme.

OS Homo sapiens.

XX

PN WO200118124-A2.

XX

PD 22-NOV-2001.

XX

PF 16-MAY-2001; 2001WO-US015866.

XX

PR 16-MAY-2000; 2000US-00572021.

XX

PA (RIBO-) RIBOZYME PHARM INC.

PA (GLAXO) GLAXO GROUP LTD.

XX

PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;

XX WPI; 2002-082995/11.

DR Novel polynucleotide which down regulates expression of Ets-related gene,

PT useful for treating cancer, diabetic retinopathy, macular degeneration,

PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.

XX

PS Claim 4; Page 92; 149pp; English.

XX

CC The invention relates to a nucleic acid molecule (I) which down regulates

CC expression of an Ets-related gene (ERG). (I) is useful for treating

CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,

CC tumour angiogenesis, diabetic retinopathy, macular degeneration, verruca

CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, Sturge

CC vulgaris, angiofibroma of tuberosus sclerosus, port-wine stains, Sturge

CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu

CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for

CC treating a patient having a condition associated with the level of ERG,

CC by contacting cells of the patient with (I) under conditions suitable for

CC the treatment. The method comprises the use of one or more therapies

CC under conditions suitable for the treatment. Leukaemia or tumour

CC angiogenesis is treated by administering (I) to the patient in

CC conjunction with one or more of other therapies such as radiation or

CC chemotherapy treatment. (I) is useful for reducing ERG activity in a

CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of

CC ERG gene, by contacting (I) with RNA, in the presence of a divalent

CC cation such as Mg2+. (I) is useful for diagnosis of conditions and

CC diseases related to the expression of ERG, and as diagnostic tool to

CC examine genetic drift and mutations within diseased cells or to detect

CC the presence of ERG RNA in a cell. (I) is useful for specifically

CC targeting genes that share homology with ERG gene or ERG fusion genes.

CC ABK17354-ABK22719 represent nucleic acids, including antisense and

CC enzymatic nucleic acid molecules which regulate expression of ERG, and

CC related PCR primers of the invention

XX

QQ Sequence 17 BP; 6 A; 2 C; 6 G; 0 T; 3 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 5.6e+02;

Matches 13; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1297 AACGAGGAGTTCACGA 1312

DB 1 AACGGGGAGUUCACGA 16

RESULT 533

ABK17468

ID ABK17468 standard; RNA; 17 BP.

XX

AC ABK17468;

XX

DT 09-APR-2002 (first entry)

DE Human ERG hammerhead ribozyme target sequence, Seq ID No 115.

XX

KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;

KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;

KW vulvar; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;

KW tumour angiogenesis; diabetic retinopathy; macular degeneration;

KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;

KW angiofibroma of tuberosus sclerosus; port-wine stain; wound healing;

KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;

KW amberzyme.

OS Homo sapiens.

XX

PN WO200118124-A2.

XX

PD 22-NOV-2001.

XX

PF 16-MAY-2001; 2001WO-US015866.

```
XX PR 16-MAY-2000; 2000US-00572021.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (GLAX ) GLAXO GROUP LTD.
XX PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;
XX DR WPI; 2002-082995/11.
XX XX Novel polynucleotide which down regulates expression of Ets-related gene,
XX PT useful for treating cancer, diabetic retinopathy, macular degeneration,
XX PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX PS Claim 4; Page 61; 149pp; English.
XX CC The invention relates to a nucleic acid molecule (I) which down regulates
XX CC expression of an Ets-related gene (ERG). (I) is useful for treating
XX CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
XX CC tumour angiogenesis, diabetic retinopathy, macular degeneration, verruca
XX CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
XX CC vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
XX CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
XX CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
XX CC treating a patient having a condition associated with the level of ERG,
XX CC by contacting cells of the patient with (I) under conditions suitable for
XX CC the treatment. The method comprises the use of one or more therapies
XX CC under conditions suitable for the treatment. Leukaemia or tumour
XX CC angiogenesis is treated by administering (I) to the patient in
XX CC conjunction with one or more of other therapies such as radiation or
XX CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
XX CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
XX CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
XX CC cation such as Mg2+. (I) is useful for diagnosis of conditions and
XX CC diseases related to the expression of ERG, and as diagnostic tool to
XX CC examine genetic drift and mutations within diseased cells or to detect
XX CC the presence of ERG RNA in a cell. (I) is useful for specifically
XX CC targeting genes that share homology with ERG gene or ERG fusion genes.
XX CC ABK17354-ABK22719 represent nucleic acids, including antisense and
XX CC enzymatic nucleic acid molecules which regulate expression of ERG, and
XX CC related PCR primers of the invention
XX SQ Sequence 17 BP; 5 A; 4 C; 6 G; 0 T; 2 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 5.6e+02;
Matches 13; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 704 AGGAGATCAGACTGGA 719
Dd |||||:|||||:|||||
2 AGGAGAUCCGCCUGGA 17
RESULT 534
ABK18069
XX ID ABK18069 standard; RNA; 17 BP.
XX AC ABK18069;
XX XX 09-APR-2002 (first entry)
XX DT Human ERG hammerhead ribozyme target sequence, Seq ID No 716.
XX DE Human, hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
XX KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
XX KW vulnary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
XX KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
XX KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
XX KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
XX KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
XX KW Osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNzyme; inozyme;
XX KW amberzyme.
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OS Homo sapiens.
XX WO2001188124-A2.
XX PN 22-NOV-2001.
XX PD 16-MAY-2001; 2001WO-US015886.
XX PF 16-MAY-2000; 2000US-00572021.
XX PR (RIBO-) RIBOZYME PHARM INC.
XX PA (GLAX ) GLAXO GROUP LTD.
XX XX Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;
XX DR WPI; 2002-082995/11.
XX XX Novel polynucleotide which down regulates expression of Ets-related gene,
XX PT useful for treating cancer, diabetic retinopathy, macular degeneration,
XX PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX PS Claim 4; Page 72; 149pp; English.
XX CC The invention relates to a nucleic acid molecule (I) which down regulates
XX CC expression of an Ets-related gene (ERG). (I) is useful for treating
XX CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
XX CC tumour angiogenesis, diabetic retinopathy, macular degeneration, verruca
XX CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
XX CC vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
XX CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
XX CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
XX CC treating a patient having a condition associated with the level of ERG,
XX CC by contacting cells of the patient with (I) under conditions suitable for
XX CC the treatment. The method comprises the use of one or more therapies
XX CC under conditions suitable for the treatment. Leukaemia or tumour
XX CC angiogenesis is treated by administering (I) to the patient in
XX CC conjunction with one or more of other therapies such as radiation or
XX CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
XX CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
XX CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
XX CC cation such as Mg2+. (I) is useful for diagnosis of conditions and
XX CC diseases related to the expression of ERG, and as diagnostic tool to
XX CC examine genetic drift and mutations within diseased cells or to detect
XX CC the presence of ERG RNA in a cell. (I) is useful for specifically
XX CC targeting genes that share homology with ERG gene or ERG fusion genes.
XX CC ABK17354-ABK22719 represent nucleic acids, including antisense and
XX CC enzymatic nucleic acid molecules which regulate expression of ERG, and
XX CC related PCR primers of the invention
XX SQ Sequence 17 BP; 5 A; 4 C; 6 G; 0 T; 2 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 5.6e+02;
Matches 13; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 704 AGGAGATCAGACTGGA 719
Dd |||||:|||||:|||||
1 AGGAGAUCCGCCUGGA 16
RESULT 535
ABK19256
XX ID ABK19256 standard; RNA; 17 BP.
XX AC ABK19256;
XX XX 09-APR-2002 (first entry)
XX DT Human ERG hammerhead ribozyme target sequence Seq ID No 1903.
XX DE Human, hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
XX KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
XX KW vulnary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
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PD 01-AUG-2002.
XX
XX
PF 06-APR-2001; 2001US-00827998.
XX
XX
PR 26-MAY-2000; 2000US-0207456P.
XX
XX
PA (GUYY/) GU Y.
PA (SHAN/) SHANNON M E.
XX
XX
PI Gu Y, Shannon ME;
XX
XX
PI WPI; 2002-697817/75.
DR
XX
XX
PT New isolated nucleic acid encoding an isoform of human pregnancy
PT associated plasma protein E, for preventing or aborting pregnancy.
XX
XX
PS Example 2; Page 146; 353pp; English.
XX
XX
CC This invention describes a novel isolated nucleic acid that encodes one
CC of three new isoforms of human pregnancy associated plasma protein E,
CC hPAPP-E. The products of the invention have abortive and contraceptive
CC activity and can be used for gene therapy or in a vaccine. The nucleic
CC acid, polypeptide encoded by it, or antibody to the polypeptide can be
CC used in pharmaceutical compositions or vaccines for preventing or
CC aborting pregnancy. PAPP-E is used in the antenatal diagnosis of
CC dysgenetic pregnancies. The nucleic acids are used as probes to assess
CC the level of PAPP-E isoform mRNA in chorionic villus samples, and the
CC antibodies can be used to assess the expression levels of PAPP-E isoform
CC proteins in chorionic villus samples, to diagnose dysgenetic pregnancies
CC antenatally. This sequence represents an oligomer used in scanning the
CC human PAPP-E genes described in the disclosure of the invention
XX
XX
SQ Sequence 17 BP; 4 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 5.6e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 288 ACTTCGTTCTGCACGG 303
Db 1 ACTTCGTTCTGCACGG 16

RESULT 538
ABK57239
ID ABK57239 standard; RNA; 17 BP.
XX
XX
AC ABK57239;
XX
XX
DT 02-JUL-2002 (first entry)
XX
XX
DE Human CLCA1 gene enzymatic nucleic acid #1610.
XX
XX
KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
KW acetylcysteine.
XX
XX
OS Homo sapiens.
XX
XX
PN WO200211674-A2.
XX
XX
PD 14-FEB-2002.
XX
XX
PF 09-AUG-2001; 2001WO-US024970.
XX
XX
PR 09-AUG-2000; 2000US-0224383P.
XX
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (SYNT) SYNTEX USA LLC.
PA (THOM/) THOMPSON J.
XX
XX
PI Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;
PI Grupe A;
XX

PI Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;
PI Grupe A;
XX
XX
DR WPI; 2002-217145/27.
XX
XX
PT Enzymatic polynucleotide that down regulates expression of chloride
PT channel calcium activated gene, useful for treating Chronic obstructive
PT pulmonary disease (COPD), chronic bronchitis and asthma.
XX
XX
PS Claim 4; Page 100; 152pp; English.
XX
XX
CC The invention relates to enzymatic nucleic acid molecules that down
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes
CC by cleaving RNA derived from the genes. The nucleic acid sequences are
CC useful as pharmaceutical agents for treating conditions such as chronic
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions
CC that are related to or will respond to the levels of CLCA1 in a cell or
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,
CC hence, are useful for treatment of a patient having a condition
CC associated with the level of CLCA1, where the invention further comprises
CC the use of one or more therapies under conditions suitable for the
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The
CC nucleic acids of the invention are also used as diagnostic tools to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of CLCA1 RNA in a cell. This sequence represents an
CC enzymatic nucleic acid molecule of the invention
XX
XX
SQ Sequence 17 BP; 5 A; 4 C; 4 G; 0 T; 4 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 75.0%; Pred. No. 5.6e+02;
Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 146 AACGCGAGCTGTCAT 161
Db 2 AACGCGAGCTGTCAT 17

RESULT 539
ABK57624
ID ABK57624 standard; RNA; 17 BP.
XX
XX
AC ABK57624;
XX
XX
DT 02-JUL-2002 (first entry)
XX
XX
DE Human CLCA1 gene enzymatic nucleic acid #1995.
XX
XX
KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
KW acetylcysteine.
XX
XX
OS Homo sapiens.
XX
XX
PN WO200211674-A2.
XX
XX
PD 14-FEB-2002.
XX
XX
PF 09-AUG-2001; 2001WO-US024970.
XX
XX
PR 09-AUG-2000; 2000US-0224383P.
XX
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (SYNT) SYNTEX USA LLC.
PA (THOM/) THOMPSON J.
XX
XX
PI Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;
PI Grupe A;
XX

DR WPI; 2002-217145/27.
XX Enzymatic polynucleotide that down regulates expression of chloride
PT channel calcium activated gene, useful for treating Chronic obstructive
PT pulmonary disease (COPD), chronic bronchitis and asthma.
XX
XX Claim 4; Page 131; 152pp; English.
PS
CC The invention relates to enzymatic nucleic acid molecules that down
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes
CC by cleaving RNA derived from the genes. The nucleic acid sequences are
CC useful as pharmaceutical agents for treating conditions such as chronic
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions
CC that are related to or will respond to the levels of CLCA1 in a cell or
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,
CC hence, are useful for treatment of a patient having a condition
CC associated with the level of CLCA1, where the invention further comprises
CC the use of one or more therapies under conditions suitable for the
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The
CC nucleic acids of the invention are also used as diagnostic tools to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of CLCA1 RNA in a cell. This sequence represents an
CC enzymatic nucleic acid molecule of the invention
XX
SQ Sequence 17 BP; 5 A; 5 C; 4 G; 0 T; 3 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 75.0%; Pred. No. 5.6e+02;
Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
QY 1573 TCAGGCGAGCCAGCTT 1588
DQ :|||:|||||:|:
DB 2 UCAAGCAGCCAGGUU 17
RESULT 540
ABK56596
ID ABK56596 standard; RNA; 17 BP.
AC
AC ABK56596;
XX
DT 02-JUL-2002 (first entry)
XX
DE Human CLCA1 gene enzymatic nucleic acid #967.
XX
KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
KW acetylcysteine.
XX
OS Homo sapiens.
XX
XX WO200211674-A2.
XX
XX 14-FEB-2002.
XX
XX 09-AUG-2001; 2001WO-US024970.
XX
XX 09-AUG-2000; 2000US-0224383P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX (SYNT) SYNTAX USA LLC.
XX
XX (THOM/) THOMPSON J.
XX
XX Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;
XX Grupe A;
XX
XX WPI; 2002-217145/27.
XX
XX Enzymatic polynucleotide that down regulates expression of chloride

PT channel calcium activated gene, useful for treating Chronic obstructive
PT pulmonary disease (COPD), chronic bronchitis and asthma.
XX
XX Claim 4; Page 75; 152pp; English.
PS
CC The invention relates to enzymatic nucleic acid molecules that down
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes
CC by cleaving RNA derived from the genes. The nucleic acid sequences are
CC useful as pharmaceutical agents for treating conditions such as chronic
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions
CC that are related to or will respond to the levels of CLCA1 in a cell or
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,
CC hence, are useful for treatment of a patient having a condition
CC associated with the level of CLCA1, where the invention further comprises
CC the use of one or more therapies under conditions suitable for the
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The
CC nucleic acids of the invention are also used as diagnostic tools to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of CLCA1 RNA in a cell. This sequence represents an
CC enzymatic nucleic acid molecule of the invention
XX
SQ Sequence 17 BP; 8 A; 6 C; 2 G; 0 T; 1 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 5.6e+02;
Matches 14; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 572 AAGCAGCTCAGAC 587
DQ :|||:|||||:|:
DB 1 AAGCAGCUCACAAAC 16
RESULT 541
ABK57560
ID ABK57560 standard; RNA; 17 BP.
AC
AC ABK57560;
XX
DT 02-JUL-2002 (first entry)
XX
DE Human CLCA1 gene enzymatic nucleic acid #1931.
XX
KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
KW acetylcysteine.
XX
OS Homo sapiens.
XX
XX WO200211674-A2.
XX
XX 14-FEB-2002.
XX
XX 09-AUG-2001; 2001WO-US024970.
XX
XX 09-AUG-2000; 2000US-0224383P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX (SYNT) SYNTAX USA LLC.
XX
XX (THOM/) THOMPSON J.
XX
XX Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;
XX Grupe A;
XX
XX WPI; 2002-217145/27.
XX
XX Enzymatic polynucleotide that down regulates expression of chloride
PT channel calcium activated gene, useful for treating Chronic obstructive
PT pulmonary disease (COPD), chronic bronchitis and asthma.
XX

PS Claim 4; Page 129; 152pp; English.

XX The invention relates to enzymatic nucleic acid molecules that down

CC regulate expression of chloride channel activated 1 (CLCA1) genes

CC by cleaving RNA derived from the genes. The nucleic acid sequences are

CC useful as pharmaceutical agents for treating conditions such as chronic

CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic

CC fibrosis, obstructive bowel syndrome and any other diseases or conditions

CC that are related to or will respond to the levels of CLCA1 in a cell or

CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,

CC hence, are useful for treatment of a patient having a condition

CC associated with the level of CLCA1, where the invention further comprises

CC the use of one or more therapies under conditions suitable for the

CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,

CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The

CC nucleic acids of the invention are also used as diagnostic tools to

CC examine genetic drift and mutations within diseased cells or to detect

CC the presence of CLCA1 RNA in a cell. This sequence represents an

CC enzymatic nucleic acid molecule of the invention

XX

SQ Sequence 17 BP; 8 A; 4 C; 2 G; 0 T; 3 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 5.6e+02;

Matches 13; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 604 AAACCTGGAGACCTACA 619

Db 1 AAACUUGAGACCUACA 16

RESULT 542

ABT34610

ID ABT34610 standard; DNA; 17 BP.

XX AC

XX ABT34610;

DT 12-JUN-2003 (first entry)

DE Tumour suppression related human fukutin oligo SEQ ID No 247.

XX

XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;

XX antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;

XX schizophrenia; protein chip; gene therapy; tumour suppression;

XX human fukutin; ds.

XX

OS Homo sapiens.

XX

XX WO2003025175-A2.

XX

XX 27-MAR-2003.

XX

XX 17-SEP-2002; 2002WO-IB004208.

XX

XX 17-SEP-2001; 2001FR-00011978.

XX

XX (MOLE-) MOLECULAR ENGINES LAB.

XX

XX Telerman A, Amson R, Tuijnder M;

XX

XX WPI; 2003-313353/30.

XX

XX New isolated nucleic acid, useful for treating viral diseases associated

XX with tumors and cell degeneration, also related polypeptides, antibodies

XX and transfected cells.

XX

XX Disclosure; Page 63; 720pp; French.

XX

XX The invention relates to a novel isolated 17 mer nucleic acid sequence,

CC given in the specification, a sequence containing at least 15 consecutive

CC nucleotides from the 17 mer sequence, a sequence with, after optimal

CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that

CC hybridizes to them under highly stringent conditions, or the complement

CC of any of them, or the corresponding RNA. The novel isolated nucleic

CC acids of the invention are useful as probes and primers for detecting,

CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one

CC component of a gene chip, in vitro as (anti)sense reagents, and for

CC production of recombinant polypeptides. Any of the nucleic acids,

CC polypeptides, vectors containing the nucleic acids, cells containing the

CC vector or antibodies directed against the polypeptides are useful for

CC preparation of pharmaceuticals for prevention and/or treatment of viral

CC diseases that are characterised by development of tumours or cell

CC degeneration, specifically cancer but also Alzheimer's disease and

CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in

CC patient samples is useful for diagnosis and/or prognosis of these

CC diseases. The polypeptides can also be used to generate antibodies, and

CC both the polypeptide and antibodies are useful as components of protein

CC chips. The nucleic acid sequences of the invention can be used in gene

CC therapy. This polynucleotide sequence represents a tumour suppression

CC related human fukutin oligonucleotide of the invention

XX

SQ Sequence 17 BP; 5 A; 2 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 17;

Best Local Similarity 93.8%; Pred. No. 5.6e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1174 ATCTTCTATGAGATGG 1189

Db 2 ATCTTCTATGAGATGG 17

RESULT 543

ABZ64792

ID ABZ64792 standard; RNA; 17 BP.

XX AC

XX ABZ64792;

XX

DT 21-MAR-2003 (first entry)

DE Human HER2 DNAzyme substrate #249.

XX

XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;

XX enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;

XX anti-rheumatic; cancer; AIDS; ss.

XX

OS Homo sapiens.

XX

XX WO200297114-A2.

XX

XX 05-DEC-2002.

XX

XX 29-MAY-2002; 2002WO-US016840.

XX

XX 29-MAY-2001; 2001US-0294140P.

XX

XX 06-JUN-2001; 2001US-0296249P.

XX

XX 10-SEP-2001; 2001US-0318471P.

XX

XX (RIBO-) RIBOZYME PHARM INC.

XX

XX Mcswiggen J;

XX

XX WPI; 2003-140484/13.

XX

XX Novel short interfering RNA and enzymatic nucleic acid useful for

XX treating cancer, modulates the expression of a nucleic acid encoding

XX HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.

XX

XX Claim 4; Page 137; 185pp; English.

XX

XX The invention relates to a novel short interfering RNA (siRNA) nucleic

XX acid molecule or an enzymatic nucleic acid molecule, that modulates

XX expression of a nucleic acid molecule encoding HER2, K-Ras, N-Ras,

XX human immunodeficiency virus (HIV) or a component of HIV. The nucleic

XX acid molecule of the invention has cytostatic, anti-HIV, and anti-

XX rheumatic activity. The nucleic acid molecules are useful for reducing

```
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
SQ Sequence 17 BP; 2 A; 6 C; 5 G; 0 T; 4 U; 0 Other;

  Query Match      0.8%; Score 14.4; DB 1; Length 17;
  Best Local Similarity 75.0%; Pred. No. 5.6e+02;
  Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 49 CCAGCAGTGTGACTGC 64
Db 1 CCAGCUGUGACUGC 16

RESULT 544
ABZ60189/c
ID ABZ60189 standard; RNA; 17 BP.
XX
AC ABZ60189;
XX
DT 21-MAR-2003 (first entry)
XX
DE Human K-Ras DNazyme substrate #301.
XX
KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
OS Homo sapiens.
XX
PN WO200297114-A2.
XX
PD 05-DEC-2002.
XX
PF 29-MAY-2002; 2002WO-US016840.
XX
PR 29-MAY-2001; 2001US-0294140P.
PR 06-JUN-2001; 2001US-0296249P.
PR 10-SEP-2001; 2001US-0318471P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J;
XX
DR WPI; 2003-140484/13.
XX
PT Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
PS Claim 58; Page 90; 185pp; English.
XX
CC The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytosstatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
SQ Sequence 17 BP; 2 A; 8 C; 2 G; 0 T; 5 U; 0 Other;

  Query Match      0.8%; Score 14.4; DB 1; Length 17;
  Best Local Similarity 93.8%; Pred. No. 5.6e+02;
  Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
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```
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 361 GGGAGAGTGACACAGG 376
Db 17 GGGAGAGTGACCATG 2

RESULT 545
ACC74114
ID ACC74114 standard; DNA; 17 BP.
XX
AC ACC74114;
XX
DT 11-JUL-2003 (first entry)
XX
DE Human CYP2D6 targeting oligo SEQ ID NO: 184.
XX
KW Human; cultured cell; coisogenic; genotypically distinct; target locus;
KW ABCB1 (MDR1); targeting oligonucleotide; CYP2D6; ss.
XX
OS Homo sapiens.
XX
PN WO2003027264-A2.
XX
PD 03-APR-2003.
XX
PF 27-SEP-2002; 2002WO-US031180.
XX
PR 27-SEP-2001; 2001US-0325992P.
XX
PA (UYDE ) UNIV DELAWARE.
XX
PI Kmiec EB, Rice MC;
XX
DR WPI; 2003-371919/35.
XX
PT Novel cultured cell collection comprising at least 5 genotypically
PT distinct cells each of which is coisogenic with respect to other cells at
PT target locus common among them, useful for identifying target locus
PT genotypes.
XX
PS Example 2; Page 102; 112pp; English.
XX
CC The invention relates to a novel collection of cultured cells, comprising
CC at least 5 genotypically distinct cells, where each of the at least 5
CC genotypically distinct cells is coisogenic with respect to the others of
CC the at least 5 genotypically distinct cells at a target locus common
CC among them, and where each of the at least 5 genotypically distinct cells
CC can be separately assayed. The collection of cells is useful for
CC identifying genotypes of a target locus that alter a cellular phenotype.
CC The collection is also useful for pharmacogenomic studies, and in studies
CC of structure-activity relationships of existing, and of potential new,
CC therapeutic agents permitting multiplex analysis of the effects of amino
CC acid changes on ligand-receptor interactions. The sequences shown in
CC ACC79391-ACC73974 represent human ABCB1 (MDR1) targeting oligos. The
CC sequences shown in ACC73975-ACC74126 represent human CYP2D6 targeting
CC oligos
XX
SQ Sequence 17 BP; 3 A; 3 C; 8 G; 3 T; 0 U; 0 Other;

  Query Match      0.8%; Score 14.4; DB 1; Length 17;
  Best Local Similarity 93.8%; Pred. No. 5.6e+02;
  Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 745 GCATCCGGGAAGTGT 760
Db 2 GCATCCGGGAAGTGT 17

RESULT 546
ACC74113/c
ID ACC74113 standard; DNA; 17 BP.
XX
```

AC ACCT74113;
XX
DT 11-JUL-2003 (first entry)
XX
DE Human CYP2D6 targeting oligo SEQ ID NO: 183.
XX
XX Human; cultured cell; coisogenic; genotypically distinct; target locus;
KW ABCB1 (MDR1); targeting oligonucleotide; CYP2D6; ss.
XX
OS Homo sapiens.
XX
FN WO2003027264-A2.
XX
PD 03-APR-2003.
XX
PF 27-SEP-2002; 2002WO-US031180.
XX
PR 27-SEP-2001; 2001US-0325992P.
XX
PA (UYDE) UNIV DELAWARE.
XX
PI Kmiec EB, Rice MC;
XX
XX WPI; 2003-371919/35.
DR
XX Novel cultured cell collection comprising at least 5 genotypically
PT distinct cells each of which is coisogenic with respect to other cells at
PT target locus common among them, useful for identifying target locus
PT genotypes.
XX
PS Example 2; Page 102; 112pp; English.
XX
XX The invention relates to a novel collection of cultured cells, comprising
CC at least 5 genotypically distinct cells, where each of the at least 5
CC genotypically distinct cells is coisogenic with respect to the others of
CC the at least 5 genotypically distinct cells at a target locus common
CC among them, and where each of the at least 5 genotypically distinct cells
CC can be separately assayed. The collection of cells is useful for
CC identifying genotypes of a target locus that alter a cellular phenotype.
CC The collection is also useful for pharmacogenomic studies, and in studies
CC of structure-activity relationships of existing, and of potential new,
CC therapeutic agents permitting multiplex analysis of the effects of amino
CC acid changes on ligand-receptor interactions. The sequences shown in
CC ACC79391-ACC7974 represent human ABCB1 (MDR1) targeting oligos. The
CC sequences shown in ACC71975-ACC74126 represent human CYP2D6 targeting
CC oligos
XX
SQ Sequence 17 BP; 3 A; 8 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 5.6e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 745 GCCATCCGGGAGTGT 760
Db 16 GGCATCCGGGAGTGT 1

RESULT 547
AAV05962/c
ID AAV05962 standard; DNA; 18 BP.
AC AAV05962;
XX
XX AAV05962;
DT 05-JUN-1998 (first entry)
XX
DE Oligonucleotide for genetic fingerprinting.
XX
KW Biotinylated-oligonucleotide; genetic fingerprinting; hybridisation;
KW molecular biology; forensic medicine; criminology; ss.
XX
OS Synthetic.
XX

FH Key modified_base 1 Location/Qualifiers
FT repeat_unit 2. .3 /tag= a /note= "Biotinylated"
FT repeat_unit 2. .3 /tag= b /note= "repeated 2-8 times"
FT modified_base 3 /tag= c /note= "Biotinylated"
FT
FT
XX RU2081919-C1.
XX
XX 20-JUN-1997.
PD
XX 17-MAR-1992; 92SU-05056570.
PF
XX 17-MAR-1992; 92SU-05056570.
PR
XX (VEKT=) VEKTOR RES PRODN ASSOC.
PA
XX Korokhov NP, Karpyshev NV, Oreshkova SF;
PI WPI; 1998-085156/08.
XX
DR Collection for genome finger-printing - by using specified sequence as
PT the oligo:nucleic probe.
PT
PS Claim 1; Col 7; 5pp; Russian.
XX
XX This sequence represents a biotinylated-oligonucleotide containing a
CC simple repeat sequence (CAC) which can be used for genetic fingerprinting
CC by blot-hybridisation of a DNA specimen. The oligonucleotide is useful in
CC molecular biology, forensic medicine, criminology, e.g. for establishing
CC blood relationship in family analysis
XX
SQ Sequence 18 BP; 5 A; 12 C; 0 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 6e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 230 GTGCTGGTGGTGGCGG 245
Db 18 GTGCTGGTGGTGGTGG 3

RESULT 548
AAZ41020/c
ID AAZ41020 standard; DNA; 18 BP.
XX
XX AAZ41020;
AC
XX
DT 26-JAN-2000 (first entry)
XX
DE Cellular inhibitor of apoptosis-2 phosphorothioate antisense oligo #12.
XX
KW Identification; genetic target; gene modulation; human; probe;
KW antisense oligonucleotide; phosphorothioate; PCR primer;
KW nucleotide sequence-based technology; antisense drug discovery;
KW target validation; ss.
XX
XX Synthetic.
OS
XX Homo sapiens.
XX
XX WO9953101-A1.
PN
XX 21-OCT-1999.
PD
XX 13-APR-1999; 99WO-US008268.
PF
XX 13-APR-1998; 98US-0081483P.
PR 28-APR-1998; 98US-00067638.
PR

(ISIS-) ISIS PHARM INC.
Cowsert LM, Baker BF, Mcneil J, Freier SM, Sasnor HM, Brooks DG;
Ohasi C, Wyatt JR, Borchers AH, Vickers TA,
WPI; 1999-620446/53.

Identifying compounds which modulate expression of nucleic acids, used to provide compounds having defined physical, chemical or bioactive properties, e.g. antisense activity.

Example 21; Page 100; 264pp; English.

A method has been developed of defining a set of compounds that modulate the expression of a target nucleic acid (tNA) sequence via binding of the compounds with the tNA sequence. The method comprises generating a library of virtual compounds in silico according to defined criteria, and evaluating in silico the binding of the virtual compounds with the tNA according to defined criteria. Also described are: (1) a method of defining a set of oligonucleotides (ONS) that modulate the expression of a tNA sequence via binding of the ONS with the tNA sequence comprising generating a library of virtual compounds in silico according to defined criteria, and evaluating in silico the binding of the virtual ONS with the tNA according to defined criteria; and (2) a method of defining a set of compounds that modulate the expression of a tNA sequence via binding of the compounds with the tNA. The methods can be used for the generation and identification of synthetic compounds having defined physical, chemical or bioactive properties. Information gathered from assays of such compounds is used to identify nucleic acid sequences that are tractable to a variety of nucleotide sequence-based technologies, e.g. antisense drug discovery and target validation. AAZ40852 to AAZ41220, and AAAY52701 to AAAY52706, represent sequences used in the exemplification of the present invention

Sequence 18 BP; 3 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

Query Watch 0.8%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred.No. 6e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 513 CCTGGAGAGCTGACC 528
DB 16 CTGTGAGAAGTTGACC 1

RESULT 549
AAZ22114/c
ID AAZ22114 standard; DNA; 18 BP.
AC AAZ22114;
CC
DT 26-NOV-1999 (first entry)
DE
XX Human c-IAP-2 mRNA inhibiting antisense oligo ISIS #2423.
KW Cellular Inhibitor of Apoptosis-2; antisense; diagnostic; therapeutic;
KW c-IAP-2; prophylaxis; infection; inflammation; tumor formation; ss.
OS Synthetic.
OS Homo sapiens.
XX US5958771-A.
XX
XX 28-SEP-1999.
PD
PF 03-DEC-1998; 98US-00205144.
PR 03-DEC-1998; 98US-00205144.
XX
XX (ISIS-) ISIS PHARM INC.
XX Bennett CF, Cowsert LM, Ackermann EJ;

CC which are useful in determining the genetic basis for disease states.
CC Compositions and methods of the invention can also be useful for the
CC identification of the targets for the development of pharmaceutical
CC agents and diagnostic methods, as well as the characterisation of the
CC differential efficacious responses to and side effects from
CC pharmaceutical agents acting on a disease as well as other treatment.
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention
XX
XX
SQ Sequence 18 BP; 5 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 6e+02; 1; Indels 0; Gaps 0;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 871 TACCTGGATGACGTGTG 886

Db 17 TACCTGGATGACGTGTG 2

RESULT 551

AAD20371

ID AAD20371 standard; DNA; 18 BP.

AC AAD20371;

DT 03-JAN-2002 (first entry)

DE Antisense oligo, ISIS# 29895, targeted to human SRC-1 DNA.

XX Human; antisense; steroid receptor coactivator-1; SRC-1; P-SRC-1; NcoA-1;
KW diagnostic; therapeutic; prophylaxis; infection; inflammation;
KW cytosolic; tumour formation; antiinflammatory; antibacterial;
KW phosphorothioate; ss.

XX Homo sapiens.

OS Synthetic.

EH Key

Location/Qualifiers

FT modified_base 1..20

FT /tag= a

FT /mod_base= OTHER

FT /note= "Phosphorothioate backbone"

FT modified_base 1..4

FT /tag= b

FT /mod_base= OTHER

FT /note= "2'-methoxyethyl residues"

FT modified_base 2

FT /tag= c

FT /mod_base= m5c

FT modified_base 3

FT /tag= d

FT /mod_base= m5c

FT modified_base 7

FT /tag= e

FT /mod_base= m5c

FT modified_base 13

FT /tag= f

FT /mod_base= m5c

FT modified_base 15..18

FT /tag= h

FT /mod_base= OTHER

FT /note= "2'-methoxyethyl residues"

FT modified_base 15

FT /tag= g

FT /mod_base= m5c

XX US6294382-B1.

PN 25-SEP-2001.

XX

PD

XX

XX

PS

27-NOV-2000; 2000US-00723534.

XX 27-NOV-2000; 2000US-00723534.

PR (ISIS-) ISIS PHARM INC.

XX Bennett CF, Cowsett LM;

XX WPI; 2001-638016/73.

XX New antisense oligonucleotides for inhibiting the expression of human

XX steroid receptor coactivator-1, particularly useful for preventing,
XX delaying or treating infection, inflammation or tumor formation.
XX Claim 3; Col 43; 36pp; English.

XX The present invention relates to an antisense compound of up to 30
XX nucleobases in length, which specifically hybridises with and inhibits
XX the expression of human steroid receptor coactivator-1 (SRC-1) (also
XX known as P-SRC-1 and NcoA-1) gene. The antisense compounds are useful for
XX diagnostics, therapeutics, prophylaxis, or as research reagents or kits.

XX The antisense oligonucleotides are useful for treating an animal,
XX particularly a human, suspected of having or being prone to a disease or
XX condition associated with the expression of SRC-1. In particular, the
XX antisense oligonucleotides are useful for preventing, delaying or
XX treating infection, inflammation or tumour formation. The present
XX sequence is an antisense oligonucleotide, ISIS# 29895, targeted to human
XX SRC-1 DNA

XX Sequence 18 BP; 6 A; 4 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 18;

Best Local Similarity 93.8%; Pred. No. 6e+02; 1; Indels 0; Gaps 0;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 152 AGCTGTCATGACACT 167

Db 1 AGCTGTCATGACACT 16

RESULT 552

ABQ65383/c

ID ABQ65383 standard; DNA; 18 BP.

XX ABQ65383;

XX 20-AUG-2002 (first entry)

XX Human gene methylation status determination method PCR primer #123.

DE Toxicological diagnosis; DNA methylation; methylation status;

XX Toxic response; human; PCR; primer; ss.

XX Homo sapiens.

XX WO200240710-A2.

XX 23-MAY-2002.

XX 08-NOV-2001; 2001WO-EP012951.

XX 14-NOV-2000; 2000DE-01056802.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2002-463571/49.

XX Toxicological diagnosis, useful for diagnosis and prognosis of adverse

XX reactions, based on effect of test compounds on methylation status of
XX selected genes, involves determining changes in DNA methylation status.
XX Example 2; Page 104; 113pp; German.

XX The present invention relates to a method of toxicological diagnosis,
 CC involving taking a DNA-containing sample from an organism or cell culture
 CC that has been treated with a test compound and determining any changes in
 CC the DNA methylation status or pattern caused by said test compound. The
 CC method is used for diagnosis and prognosis of adverse toxic responses in
 CC individuals. The present sequence is a PCR primer used to demonstrate the
 CC method of the invention
 CC
 XX Sequence 18 BP; 3 A; 0 C; 9 G; 6 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 6e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 774 CCTCAAAACGCCCAAC 789
 DB 16 CCTCAAAACGCCCAAC 1
 RESULT 553
 ABK34171/C
 ID ABK34171 standard; DNA; 18 BP.
 XX
 AC ABK34171;
 XX
 DT 18-JUN-2002 (first entry)
 DE Human UNG PCR primer #1.
 XX
 KW Human; ss; astrocytoma; cytostatic; staging; cysteine methylation; CpG;
 KW bisulphite; brain tissue; MALDI; ESI; electron spray mass spectrometry;
 KW matrix assisted laser desorption/ionization mass spectrometry; primer.
 XX
 OS Homo sapiens.
 XX
 FN WO200202808-A2.
 XX
 PD 10-JAN-2002.
 XX
 PF 02-JUL-2001; 2001WO-EP007538.
 XX
 PR 30-JUN-2000; 2000DE-01032529.
 PR 01-SEP-2000; 2000DE-01043826.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 WIPI; 2002-171649/22.
 XX
 PT Novel chemically modified genomic DNA sequences, useful in the
 PT characterization, classification, differentiation, grading, staging,
 PT treatment and/or diagnosis of astrocytomas or predisposition to
 PT astrocytomas.
 XX
 PS Example; Page 26; 37pp; English.
 XX
 CC The invention relates to a nucleic acid comprising a sequence (I) of at
 CC least 18 bases in length of a segment of chemically pre-treated genomic
 CC DNA which has any one of the sequences of (ABK3919-ABK4032) or its
 CC complement. Also included are an oligonucleotide or peptide nucleic acid
 CC (or set thereof) of at least 9 nucleotides which hybridises to (I),
 CC primers for (I), probes for detecting cytosine methylation or single-
 CC nucleotide polymorphisms (SNP) in (I), an array of oligomers or peptide
 CC nucleic acids for analysing diseases associated with the methylation
 CC states of the CpG dinucleotides of (I). The array is useful for
 CC determining genetic and/or epigenetic parameters, classification,
 CC differentiation, grading, staging, treatment and/or diagnosis of
 CC astrocytomas, or the predisposition to astrocytomas by analysing cytosine
 CC methylations, involves obtaining a biological sample containing genomic
 CC DNA, extracting the genomic DNA, converting cytosine bases which are
 CC un methylated at the 5-position, in the genomic DNA sample, to uracil or

CC another base which is dissimilar to cytosine in terms of hybridisation
 CC behaviour, by chemical treatment and amplifying chemically pre-treated
 CC genomic DNA fragments using the array and a polymerase, where the
 CC amplificates carry a detectable label. The method further involves
 CC identifying methylation status of the cytosine positions by reference to
 CC analysing methylation status of the cytosine positions by reference to
 CC one or more data sets. The genomic DNA is chemically treated by using a
 CC bisulphite, hydrogen sulphite or disulphite. The amplification step
 CC amplifies DNA which is of particular interest in astrocytoma or brain
 CC tissue, based on the specific genomic methylation status of brain
 CC tissues, as opposed to background DNA. The amplificates carry a
 CC fluorescent label or radionuclide. Optionally, the labels of the
 CC amplificates are detachable molecule fragments having a typical mass
 CC which are detected in a mass spectrometer. The fragments of chemically
 CC pre-treated genomic DNA to be amplified, have a single positive or
 CC negative charge for a better detectability in the mass spectrometer.
 CC Preferably, the amplificates or fragments of the amplificates are
 CC detected by matrix assisted laser desorption/ionization mass spectrometry
 CC (MALDI) or using electron spray mass spectrometry (ESI). The present
 CC sequence is a PCR primer used to amplify a region containing a methylated
 CC cytosine from one of the chemically pre-treated reference DNA samples of
 CC the invention. Note: The sequence data for this patent did not form part
 CC of the printed specification, but was obtained in electronic format
 CC directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 18 BP; 3 A; 0 C; 9 G; 6 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 6e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 774 CCTCAAAACGCCCAAC 789
 DB 16 CCTCAAAACGCCCAAC 1
 RESULT 554
 ABK28109/C
 ID ABK28109 standard; DNA; 18 BP.
 XX
 AC ABK28109;
 XX
 DT 09-APR-2002 (first entry)
 DE Human UNG methylation state PCR primer #1.
 XX
 KW Human; ss; astrocytoma; oligoastrocytoma; oligodendroglioma; antitumour;
 KW cytostatic; cytosine methylation state; single nucleotide polymorphism;
 KW SNP; CpG; brain tumour; PCR; primer.
 XX
 OS Homo sapiens.
 XX
 FN WO200200705-A2.
 XX
 PD 03-JAN-2002.
 XX
 PF 02-JUL-2001; 2001WO-EP007539.
 XX
 PR 30-JUN-2000; 2000DE-01032529.
 PR 01-SEP-2000; 2000DE-01043826.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 WIPI; 2002-139900/18.
 XX
 PT Oligonucleotide for diagnosing and treating tumors and cancer especially
 PT gliomas, astrocytomas and oligodendromas, comprises chemically modified
 PT genomic sequences of genes associated with tumors and cancers.
 XX
 PS Example 4; Page 23; 31pp; English.
 XX

CC The invention relates to a nucleic acid (I) comprising a sequence of at
 CC least 18 bases of a segment of chemically pretreated genomic DNA (II)
 CC according to one of the sequences (S1) selected from 120 sequences, and
 CC its complementary sequences. Also included are an oligomer (III),
 CC especially an oligonucleotide or peptide nucleic acid (PNA)-oligomer,
 CC comprising a sequence of at least 9 nucleotides which hybridises to or is
 CC identical to (II), and complementary sequences, a set of oligomers (IV)
 CC comprising at least two (Iii) and their use for detecting the cytosine
 CC methylation state and/or single nucleotide polymorphisms (SNPs) in (II),
 CC and manufacturing (M1) an arrangement of different oligomers (array)
 CC fixed to a carrier material for analysing diseases associated with the
 CC methylation state of the CpG dinucleotide of (S1), where at least one
 CC oligomer is coupled to solid phase. The set of oligomers (IV) are useful
 CC as primer oligonucleotides for the amplification of (II) especially for
 CC characterising classifying and differentiating oligodendroglioma,
 CC astrocytoma and oligoastrocytoma tumours (by ascertaining genetic and/or
 CC epigenetic parameters of genomic DNA by analysing cytosine methylation
 CC and single nucleotide polymorphisms). The present sequence is a PCR
 CC primer used to amplify the modified genomic sequence from a gene
 CC associated with brain tumours
 XX
 SQ Sequence 18 BP; 3 A; 0 C; 9 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 6e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 774 CCTCAAAACGCCCAAC 789
 Dd 16 CCTCAAAACGCCCAAC 1

RESULT 555
 AAD41922
 ID AAD41922 standard; DNA; 18 BP.

XX AAD41922;

AC AAD41922;

DT 30-OCT-2002 (first entry)

DE Human SRC-1 antisense oligonucleotide, ISRs 29855.
 XX Human; steroid receptor coactivator-1; SRC-1; antisense compound;
 KW diagnostic; therapeutic; prophylaxis; antisense therapy; antisense;
 KW phosphorothioate backbone; ss.

XX Homo sapiens.

OS Synthetic.

EH Key Location/Qualifiers
 FT modified_base 1..18

FT /tag= a

FT /mod_base= OTHER

FT /note= "Phosphorothioate backbone"

FT modified_base 1..4

FT /tag= b

FT /mod_base= OTHER

FT /note= "2'methoxyethyl nucleotides"

FT modified_base 3

FT /tag= d

FT /mod_base= m5c

FT modified_base 7

FT /tag= e

FT /mod_base= m5c

FT modified_base 13

FT /tag= f

FT /mod_base= m5c

FT modified_base 15..18

FT /tag= c

FT /mod_base= OTHER

FT /note= "2'methoxyethyl nucleotides"

FT modified_base 15

FT /tag= g

FT /mod_base= m5c
 XX WO200244325-A2.
 FN
 PD 06-JUN-2002.

XX 26-NOV-2001; 2001WO-US044179.

XX 27-NOV-2000; 2000US-00723379.

XX (ISIS-) ISIS PHARM INC.

XX (BAYU) BAYLOR COLLEGE MEDICINE.

XX O'malley BW, Bennett CF, Cowse LM;

XX WPT; 2002-537447/57.

XX Novel antisense compound targeted to nucleic acid molecules encoding
 XX human steroid receptor coactivator-1 (SRC-1), useful for inhibiting
 XX expression of SRC-1 in human cells or tissues.

XX Example 15; Page 79; 103pp; English.

XX The invention relates to antisense compounds, compositions and methods
 XX for modulating the expression of human steroid receptor coactivator-1
 XX (SRC-1). The compositions comprise antisense oligonucleotides targeted
 XX to nucleic acids encoding SRC-1. The antisense compound is useful for
 XX inhibiting the expression of SRC-1 in human cells or tissues. It is also
 XX useful for treating a human having a disease or condition associated with
 XX SRC-1, by inhibiting expression of SRC-1. It is also useful for
 XX diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 XX It is also used in antisense therapy. The present sequence is an
 XX antisense oligonucleotide targeted to human SRC-1 DNA. This sequence is
 XX used in the exemplification of the invention

SQ Sequence 18 BP; 6 A; 4 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 18;

Best Local Similarity 93.8%; Pred. No. 6e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 152 AGCTGTCATGACACT 167

Dd 1 AGCTGTCATGACACT 16

RESULT 556

ABZ10908

ID ABZ10908 standard; DNA; 18 BP.

XX AC ABZ10908;

DT 16-JAN-2003 (first entry)

DE Haematopoietic cell proliferation disorder related oligonucleotide #1048.

XX Human; haematopoietic cell proliferation disorder; cytostatic;
 KW gene therapy; lymphocytic leukaemia; acute myelogenous leukaemia;
 KW cytosine methylation state; probe; primer; ss.

XX Homo sapiens.

OS Synthetic.

XX WO200277272-A2.

XX 03-OCT-2002.

XX 26-MAR-2002; 2002WO-EP003401.

XX 26-MAR-2001; 2001US-0278333P.

XX (EPIG-) EPIGENOMICS AG.

PT Method for characterizing, classifying and/or uncharacterizing some of
PT prostate cancers, by analyzing the genetic and/or epigenetic parameters
PT of genomic DNA, particularly by determining its cytosine methylation
PT status.


```

XX PS Example 2; Page 19; 21lpp; English.
XX CC The invention relates to a novel method for characterising, classifying
XX CC and/or differentiating renal and prostate cancer. The method comprises
XX CC extracting genomic DNA from a biological sample, converting cytosine
XX CC bases (by chemical treatment) that are unmethylated at the 5-position to
XX CC uracil or another base, and amplifying at least one fragment of the
XX CC chemically pretreated genomic DNA using sets of primer oligonucleotides
XX CC and a polymerase. The method is useful for detecting the cytosine
XX CC methylation state and/or single nucleotide polymorphisms in genomic DNA,
XX CC particularly for characterising, classifying and/or differentiating renal
XX CC and prostate cancers. The oligomers are useful as primer oligonucleotides
XX CC for the amplification of any of the 112 DNA sequences of the invention.
XX CC The set of oligomer probes is useful for detecting the cytosine
XX CC methylation state and/or single nucleotide polymorphisms in any of the
XX CC 112 chemically pretreated genomic DNA sequences. The method is also
XX CC useful for identifying the tissue of origin of cancer cells. The method
XX CC allows the classification, differentiation and/or diagnosis of cancer
XX CC tissues using minute samples which would be inadequate for histological
XX CC or cytological analysis, the present sequence is used in the
XX CC exemplification of the invention.
XX SQ Sequence 18 BP; 3 A; 0 C; 9 G; 6 T; 0 U; 0 Other;
      Query Match      0.8%; Score 14.4; DB 1; Length 18;
      Best Local Similarity 93.8%; Pred. No. 6e+02;
      Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 774 CCTCAACACGCCCAAC 789
Db 16 CCTCAACACGCCCAAC 1
RESULT 559
ID ABQ80440/c
XX AC ABQ80440;
XX DE Primer: Rat PEPCK forward.
XX DT 04-DEC-2003 (first entry)
XX KW Primer; amplify; PCR; PEPCK; phosphoenolpyruvate carboxykinase; SHP;
XX KW short heterodimer partner; Zucker; diabetic; fatty; rat; ZDF; insulin;
XX KW gluconeogenesis; glucose production; hyperglycemia; hypocalcaemia;
XX KW obesity; glucose tolerance; insulin resistance; metabolic syndrome X;
XX KW Type 2; diabetes; Type 1; cardiovascular disease; ss.
XX OS Rattus rattus.
XX PN WO2003059253-A2.
XX PD 24-JUL-2003.
XX PF 18-DEC-2002; 2002WO-US040360.
XX PR 21-DEC-2001; 2001US-0344876P.
XX PA (SMIK ) SMITHKLINE BEECHAM CORP.
XX PI Klierer SA, Goodwin BJ, Way JM;
XX DR WPI; 2003-627344/59.
XX PT Composition useful for altering gluconeogenesis or glucose production in
XX PT the treatment of e.g. insulin resistance or cardiovascular disease
XX PT comprises an agent which modulates short heterodimer partner expression
XX PT or activity.
XX PS Example 1; Page 12; 9pp; English.

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CC The sequences given in ABQ80440-45 are primers and probes which were used
CC to determine PEPCK (phosphoenolpyruvate carboxykinase) and SHP (short
CC heterodimer partner) expression in Zucker diabetic fatty (ZDF) fa/fa rats
CC treated with insulin. The composition of the invention for alteration of
CC gluconeogenesis or glucose production comprises an agent which modulates
CC SHP expression or activity. The composition is used for altering
CC gluconeogenesis or production of glucose useful for treating
CC hyperglycemia or hypocalcaemia; for treating obesity, impaired glucose
CC tolerance, insulin resistance, metabolic syndrome X, Type 2 diabetes,
CC Type 1 diabetes, or cardiovascular disease. The agent induces, increases,
CC inhibits or decreases expression or activity of SHP
XX SQ Sequence 18 BP; 5 A; 0 C; 8 G; 5 T; 0 U; 0 Other;
      Query Match      0.8%; Score 14.4; DB 1; Length 18;
      Best Local Similarity 93.8%; Pred. No. 6e+02;
      Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 1481 TCCACAACCTTCCTGA 1496
Db 16 TCCACAACCTTCCTCA 1
RESULT 560
ID AAD60490/c
XX AC AAD60490;
XX DT 18-DEC-2003 (first entry)
XX DE Human c-IAP-2 antisense oligonucleotide #ISIS #23463.
XX KW Human; antisense; cellular inhibitor of apoptosis-2; c-IAP-2; cancer;
XX KW hyperproliferative condition; apoptosis inhibitor 2; autoimmune disease;
XX KW API-1; hIAP-1; MHC; gene therapy; phosphorothioate; ss.
XX OS Homo sapiens.
XX QS Synthetic.
XX FH Key
XX FT modified_base 1..18
XX FT Location/Qualifiers
XX FT /mod_base= a
XX FT /note= "Phosphorothioate backbone; All cytidine residues
XX FT are 5-methylcytidines"
XX FT modified_base 1..4
XX FT /mod_base= OTHER
XX FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX FT modified_base 15..18
XX FT /mod_base= OTHER
XX FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX PN US2003083300-A1.
XX PD 01-MAY-2003.
XX PF 16-JUL-2002; 2002US-00197290.
XX PR 23-SEP-1999; 99WO-US022083.
XX PR 04-OCT-2001; 2001US-00857299.
XX PA (BENN/) BENNETT C F.
XX PA (ACKE/) ACKERMANN E J.
XX PA (COWS/) COWSERT L M.
XX PI Bennett CF, Ackermann EJ, Cowsert LM;
XX DR WPI; 2003-755119/71.
XX PT New antisense compound, preferably an oligonucleotide, for inhibiting

```

PT expression of human Cellular Inhibitor of Apoptosis-2 in human cells or
PT tissues, and for treating diseases, such as cancer or an autoimmune
PT disease.
XX
XX
PS Claim 3; Page 22; 34pp; English.
XX
CC The invention relates to antisense compounds targetted to a nucleic acid
CC encoding human cellular inhibitor of apoptosis-2 (also known as c-IAP-2,
CC apoptosis inhibitor 2, API-1, hIAP-1 and MHC) to inhibit its expression.
CC Antisense compounds of the invention are used to induce apoptosis in
CC human cells or tissues to treat diseases or conditions associated with
CC insufficient apoptosis. They are used to treat diseases or conditions
CC associated with c-IAP-2 such as hyperproliferative conditions especially
CC cancer or autoimmune diseases. The invention is also useful in antisense
CC gene therapy. The present sequence is an antisense oligonucleotide
CC targetted to human c-IAP-2 DNA
XX
SQ Sequence 18 BP; 3 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 6e+02; 1; Indels 0; Gaps 0;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 513 CTTGGAGAAGCTGACC 528
DB 16 CTTGGAGAAGTTGACC 1

RESULT 561
AAAT74921/C
ID AAT74921 standard; DNA; 19 BP.
XX
XX
AC AAT74921;
XX
XX
DT 07-JAN-1998 (first entry)
XX
DE 3'-primer for HLA DR2 (15 and 16) allele amplification.
XX
XX polymorphic; Human leukocyte antigen; HLA; DNA sequencing; PCR;
XX polymerase chain reaction; allele; ss.
XX
OS Synthetic.
XX
PN WO9723650-A2.
XX
XX 03-JUL-1997.
XX
XX 19-DEC-1996; 96WO-US020202.
XX
XX 22-DEC-1995; 95US-00577858.
XX
XX (VISI-) VISIBLE GENETICS INC.
XX
XX Stevens JK, Dunn JM, Leushner J, Green RJ;
XX WPI; 1997-351085/32.
XX
XX
PT Identification of allele type of a known polymorphic genetic locus - used
PT particularly for human leukocyte antigen allele determination.
XX
XX Example 1; Page 17; 75pp; English.
XX
CC This 3'-PCR primer is used in a novel method for identification of allele
CC types (in this case human leukocyte antigen (HLA) class II gene alleles)
CC of a known polymorphic genetic locus in a sample. The allele type is
CC identified by first combining the sample with a sequencing reaction
CC mixture containing a polymerase, nucleoside feed stocks, one type of
CC chain terminating nucleoside and a sequencing primer under conditions
CC suitable for template dependent primer extension to form a number of
CC oligonucleotide fragments of differing lengths, which are then evaluated
CC on a denaturing gel. This determines the position of the type of base
CC corresponding to the chain terminating bases in the primer. However, this
CC method differs from standard sequencing procedures, instead of performing

CC and evaluating four concurrent reactions, the sample is concurrently
CC combined with at most three sequencing reaction mixtures containing
CC different types of chain terminating nucleosides. The method can be used
CC for the evaluation of polymorphic sites, and for determining the allelic
CC type of a polymorphic gene. The methods are particularly useful for
CC determining the HLA allele present in a sample
XX
SQ Sequence 19 BP; 2 A; 7 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 6.3e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1590 CCGCGTGGTGACACC 1605
DB 17 CCGCGGTGGTGACACC 2

RESULT 562
AAV13329
ID AAV13329 standard; DNA; 19 BP.
XX
XX AAV13329;
XX
DT 14-MAY-1998 (first entry)
XX
DE Sense primer Exon 11 for human 5-lipoxygenase gene.
XX
XX Inflammatory disease; polymorphism; 5-lipoxygenase; asthma;
XX ulcerative colitis; bronchitis; sinusitis; psoriasis; rhinitis;
XX arthritis; diagnosis; treatment; PCR primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
XX WO9742347-A2.
XX
XX 13-NOV-1997.
XX
XX 29-APR-1997; 97WO-US007137.
XX
XX 06-MAY-1996; 96US-0016890P.
XX 25-APR-1997; 97US-00846020.
XX
XX (BGHM) BRIGHAM & WOMENS HOSPITAL.
XX
XX Drazen JM, In K, Asano K, Beier D, Grobholz J;
XX WPI; 1997-558997/51.
XX
XX Classifying patients with inflammatory disease, specifically asthma -
XX according to polymorphisms in 5-lipoxygenase gene regulatory region, e.g.
XX to identify candidates for lipoxygenase inhibitor treatment.
XX
XX Example 1; Page 19; 56pp; English.
XX
CC The present sequence was used in the development of a novel method for
CC classifying patients suffering from an inflammatory disease. The method
CC comprises identifying in DNA from at least 1 patient a sequence
CC polymorphism, as compared with the normal 5-lipoxygenase (5-LOX) gene
CC (AAT88431), in a 5-LOX regulatory gene sequence. The method can be
CC applied to subjects with asthma, ulcerative colitis, bronchitis,
CC sinusitis, psoriasis, allergic and non-allergic rhinitis, lupus or
CC rheumatoid arthritis. Specifically it can be used to diagnose asthma or
CC susceptibility to disease, identify treatments suitable for individual
CC patients or assess the likely success of treatment
XX
SQ Sequence 19 BP; 3 A; 8 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 6.3e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1716 CCTGAGCCATGTTTCAC 1731
DB 3 CCTGAGCCATGTTTCAC 18

RESULT 563
AAA82758
ID AAA82758 standard; DNA; 19 BP.
AC AAA82758;
XX
XX 04-DEC-2000 (first entry)
XX cdk3 ribozyme binding site #43.
XX
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
XX Mammalia.
XX
XX WO200032765-A2.
XX
XX 08-JUN-2000.
XX
XX 06-DEC-1999; 99WO-US028772.
XX
XX 04-DEC-1998; 98US-0110954P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Tritz R, Welch PJ, Barber JR, Robbins JM;
XX
XX WPI; 2000-412314/35.
XX
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.
XX
XX Disclosure; Page 51; 109pp; English.
XX
XX The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX
XX Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;
SQ

Query Match 0.8%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 6.3e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 996 CTGCTCATCAACGAG 1011
DB 1 CTGCTCATCAATGAG 16

RESULT 564
AAA14782/c
ID AAA14782 standard; DNA; 19 BP.
XX
XX AAA14782;
AC
XX
XX 08-AUG-2000 (first entry)
XX
XX PCR primer used to isolate DNA encoding a decorin binding protein.
DE
XX Decorin binding protein; DbpA; DbpB; adhesin; infection; Lyme disease;
KW spirochete infection; vaccine; passive immunotherapy; PCR primer; ss.
KW
XX Borrelia burgdorferi.
OS

QY 910 GTGAACTGTTCTCTGT 925
DB 17 GTGTAAGTCTCTCTGT 2

RESULT 565
AAZ57154
ID AAZ57154 standard; DNA; 19 BP.
XX
XX AAZ57154;
AC
XX
XX 03-APR-2000 (first entry)
XX
XX Phosphorothioate 19-mer oligonucleotide #6.
DE
XX Phosphorothioate; activator; oligonucleotide synthesis; phosphoramidite;
KW phosphitylating reagent; ss.
KW
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
FH modified_base 1..19
FT /tag= a
FT /note= "phosphorothioate linkages"
FT
XX
XX WO9962922-A1.
XX
XX 09-DEC-1999.
XX
XX 02-JUN-1999; 99WO-US012251.
XX
XX 02-JUN-1998; 98US-0087757P.
PR 23-OCT-1998; 98US-00177953.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX

XX WO200021989-A1.
XX
XX 20-APR-2000.
XX
XX 08-OCT-1999; 99WO-US023481.
XX
XX 09-OCT-1998; 98US-0103728P.
XX
XX (MEDI-) MEDIMUNE INC.
XX
XX Hanson MS, Mullikin BA, Roberts W, Lathigra R;
XX
XX WPI; 2000-317936/27.
XX
XX Novel decorin binding proteins, DBP A and B useful as vaccines for
PT protecting humans against Lyme disease and as immunogens for production
PT of antibodies used in passive immunotherapy, or as diagnostic reagents.
XX
XX Disclosure; Page 86; 93pp; English.
XX
XX The present sequence represents a primer which was used to isolate DNA
CC encoding a decorin binding protein (Dbp). The specification describes
CC DbpA and DbpB. DbpA and DbpB are adhesins, and are immunogenic. DbpA is a
CC target for antibody-mediated killing of B. burgdorferi during the early
CC stages of infection. The polypeptides are useful for producing antibodies
CC to diagnose Lyme disease (spirochete infections), or for producing
CC vaccines for prophylaxis and/or treatment of such infections. The
CC antibodies may be useful in passive immunotherapy, as diagnostic reagents
CC and as reagents in other processes such as affinity chromatography
XX
XX Sequence 19 BP; 8 A; 5 C; 4 G; 2 T; 0 U; 0 Other;
SQ

Query Match 0.8%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 6.3e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

PI Sanghvi Y, Manoharan M, Ravikumar VT;
XX WPI; 2000-097311/08.
XX Preparation of nucleoside phosphoramidites and oligonucleotides.
PT Example 26; Page 84; 153pp; English.
PS
XX The present invention describes nucleoside phosphoramidites and
CC oligonucleotides (ON's) prepared using pyridinium, imidazolium or
CC benzimidazolium salts as activators. The preparation of a phosphorylated
CC compound comprises reacting a compound having a hydroxyl group with a
CC phosphorylating reagent in the presence of a pyridinium salt in a
CC solvent. The phosphoramidites are useful as building blocks for synthesis
CC of oligonucleotides, which are potentially useful in therapeutic and
CC diagnostic applications. The activators can be produced in situ by mixing
CC pyridine and an acid, producing benefits in large scale synthesis.
CC Compared with conventional activators, e.g. 1H tetrazole, the pyridinium
CC salts, and materials necessary for their generation in situ, are non-
CC explosive and easier to store, and also cheaper and have higher
CC solubility in organic solvents. Final purity of the phosphorylated
CC material results from use of a less acidic reaction medium when
CC pyridinium salts are used. The present sequence represents a
CC phosphorochalcate 19-mer oligonucleotide, the synthesis of which is
CC described in an example from the present invention
XX
XX Sequence 19 BP; 0 A; 0 C; 12 G; 7 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 6.3e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 230 GTGGTGGTGGTGGCGG 245
DB 3 GTGGTGGTGGTGGTGG 18
RESULT 566
AAAF0370/C
ID AAF0370 standard; DNA; 19 BP.
XX
XX AAF0370;
XX
XX 29-JUN-2001 (first entry)
DT PCR primer for osteoblast-associated marker OPN.
DE
XX
XX Osteogen related receptor alpha: ERalpha; osteoblast proliferation;
KW osteoblast differentiation; bone loss; osteoporosis; osteoarthritis;
KW Paget's disease; periodontal disease; osteolytic bone tumor;
KW osteochondrodysplasia; osteogenesis imperfecta; osteomalacia;
KW sclerosing bone dysplasia; fibrodysplasia ossificans progressiva;
KW osteoblastic bone metastasis; prostate cancer; osteosarcoma; PCR primer;
KW ss.
XX
XX Rattus sp.
OS
XX
XX WO200122988-A1.
XX
XX 05-APR-2001.
PD
XX
XX 30-AUG-2000; 2000WO-CA001015.
PF
XX
XX 30-SEP-1999; 99CA-02284103.
PR
XX
XX (AUBI/) AUBIN J E.
PA (BONN/) BONNELYE E.
XX
XX Aubin JE, BonnelYE E;
PI
XX WPI; 2001-273487/28.
DR
XX
XX Modulating osteoblast proliferation or differentiation for treating bone

PT diseases, e.g. osteoporosis, bone tumor, comprises administering an
PT estrogen related receptor (ERR) alpha agonist, antagonist, antibody or
XX ERR alpha gene.
XX
XX Disclosure; Page 30; 73pp; English.
XX
XX PCR primers AAF0364-83 were used to amplify osteoblast-associated
CC markers. The specification describes a method for increasing or reducing
CC osteoblast proliferation or differentiation. The method comprises
CC administering an estrogen related receptor alpha (ERRalpha) agonist or
CC antagonist, a purified ERalpha or antibody, a nucleotide sequence
CC encoding ERalpha, an ERalpha antisense sequence, or an ERalpha
CC modulator. The method is useful for increasing or reducing osteoblast
CC proliferation or differentiation in a mammal. The method may be used for
CC treating a disorder associated with bone loss, such as osteoporosis,
CC osteoarthritis, Paget's disease, periodontal disease, osteolytic bone
CC tumor metastases in e.g. breast cancer and multiple myeloma,
CC osteochondrodysplasias, osteogenesis imperfecta, sclerosing bone
CC dysplasias and osteomalacia. The method may also be used for treating
CC fibrodysplasia ossificans progressiva, or osteoblastic bone metastases,
CC such as prostate cancer and osteosarcomas
XX
XX Sequence 19 BP; 3 A; 6 C; 6 G; 4 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 6.3e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 373 CAGGCTTCAGCCACGT 388
DB 19 CAGGCTTCAGCCAACT 4
RESULT 567
AAH57920
ID AAH57920 standard; DNA; 19 BP.
XX
XX AAH57920;
XX
XX 10-SEP-2001 (first entry)
DT Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:344.
DE
XX
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnary;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytosstatic;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antiscikling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
XX Homo sapiens.
OS
XX Synthetic.
XX
XX WO200130362-A2.
XX
XX 03-MAY-2001.
PD
XX
XX 26-OCT-2000; 2000WO-US029500.
PF
XX
XX 26-OCT-1999; 99US-0161532P.
PR
XX
XX (IMMU-) IMMUSOL INC.
PA
XX
XX Robbins JM, Tritz R;
PI
XX WPI; 2001-300427/31.
DR
XX
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix

PT metalloproteinases, growth factors and cell-cycle dependent kinases.
 XX
 PS Example 1; Page 97; 408pp; English.
 XX
 CC The present invention describes a method for treating a proliferative
 CC skin or eye disease and scarring. The method involves administering a
 CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
 CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
 CC dependent kinase, growth factor or a reductase, or administering a
 CC nucleic acid molecule (II) comprising a promoter operably linked to a
 CC nucleic acid segment encoding (I). (I) can have antiproliferative,
 CC dermatological, cytostatic, antiseborrheic, antidiabetic, anisickling,
 CC ophthalmological, vulnary, keratolytic and virucide activities, and
 CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
 CC in gene therapy. (I) and (II) are useful for treating proliferative skin
 CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
 CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
 CC also be used for treating proliferative eye diseases such as diabetic
 CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
 CC prematurity and retinal detachment, and for treating and preventing
 CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
 CC scar. AAH57577 to AAH62099 represent sequences used in the
 CC exemplification of the present invention
 XX
 SQ Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.4; DB 1; Length 19;
 Best Local Similarity 93.8%; Pred. No. 6.3e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 996 CCTGCTCATCAACGAG 1011
 DB 1 CCTGCTCATCAATGAG 16
 RESULT 568
 AAL51775/c
 ID AAL51775 standard; DNA; 19 BP.
 AC AAL51775;
 XX
 XX 24-APR-2003 (first entry)
 DT TNF alpha PCR primer #2.
 DE
 XX Screening; G protein-coupled receptor; cholesterol metabolism; ss;
 XX inflammatory disease; transplantation rejection; immune insufficiency;
 XX infection; PCR; primer; TNF alpha.
 XX Unidentified.
 OS
 XX WO200284286-A1.
 PN
 XX 24-OCT-2002.
 PD
 XX 11-APR-2002; 2002WO-JP003613.
 PF
 XX 12-APR-2001; 2001JP-00114203.
 PR 14-JUN-2001; 2001JP-00180562.
 PR 16-JUL-2001; 2001JP-00214922.
 PR 27-DEC-2001; 2001JP-00397767.
 PR 22-FEB-2002; 2002JP-00045728.
 XX
 XX (TAKE) TAKEDA CHEM IND LTD.
 PA
 XX Hinuma S, Fujii R, Kawamata Y, Miwa M, Hosoya M;
 PI WPI; 2003-075569/07.
 XX
 XX Screening method for agonists or antagonists to alter binding properties
 PT of novel G protein-coupled receptor protein in controlling cholesterol
 PT metabolism, used to diagnose and treat inflammatory diseases or
 PT infections.

XX Disclosure; Page 174; 186pp; Japanese.
 PS
 XX The invention comprises a method for screening for compounds that are
 CC capable of changing the binding properties of a G protein-coupled
 CC receptor protein. The method of the invention is useful for screening
 CC agonists or antagonists to alter binding properties of novel G protein-
 CC coupled receptor proteins in controlling cholesterol metabolism. The
 CC method of the invention is useful in the diagnosis and treatment of
 CC inflammatory diseases, excessive immune reaction after transplantation,
 CC immune insufficiency and infections. The present DNA sequence represents
 CC a TNF alpha PCR primer
 XX
 SQ Sequence 19 BP; 2 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.4; DB 1; Length 19;
 Best Local Similarity 93.8%; Pred. No. 6.3e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 676 AAGCTCACACCAACC 691
 DB 17 AAGCTCACGACCAACC 2
 RESULT 569
 ADA25683
 ID ADA25683 standard; RNA; 19 BP.
 XX
 AC ADA25683;
 XX
 DT 20-NOV-2003 (first entry)
 DE Human REL-A short interfering nucleic acid SEQ ID NO:31.
 XX
 XX short interfering nucleic acid; siRNA; nuclear factor kappa B; NF-kappaB;
 KW RNA interference; vasotropic; nontropic; antiparkinsonian;
 KW neuroprotective; cytostatic; antiinflammatory; antiallergic; virucide;
 KW anti-HIV; immunosuppressive; anticonvulsant; nephrotropic; gene therapy;
 KW modulation; inhibition; restenosis; central nervous system lesion;
 KW Alzheimer's disease; Parkinson's disease; Huntington's disease; epilepsy;
 KW dementia; amyotrophic lateral sclerosis; cancer;
 KW polycystic kidney disease; inflammatory disease; allergic disease;
 KW viral infection; HIV; autoimmune disease; transplant rejection; ribozyme;
 KW human; v-rel reticuloendotheliosis viral oncogene homologue A; REL-A;
 KW nuclear factor; ss.
 XX
 XX Synthetic
 OS
 XX Homo sapiens.
 XX
 XX WO2003070970-A2.
 PN
 XX 28-AUG-2003.
 PD
 XX 20-FEB-2003; 2003WO-US004951.
 PF
 XX 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 PA
 XX Mcswiggen J, Beigelman L;
 PI WPI; 2003-689788/65.
 XX
 XX New short interfering nucleic acid downregulates expression of the NF-
 PT kappaB gene useful e.g. for treatment and diagnosis of cancer and
 PT inflammation.
 XX

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PS Example 3; Page 127; 149pp; English.
XX
CC The present invention describes a short interfering nucleic acid (siNA)
CC that downregulates expression of a nuclear factor kappa B (NF-kappaB)
CC gene by RNA interference. Also described: (1) kits for in vitro or in
CC vivo delivery of siNA; (2) conjugates and/or complexes of siNA; and (3)
CC vectors that express siNA. The siNAs have vasotropic, neurotropic,
CC antiparkinsonian, neuroprotective, cytosstatic, antiinflammatory,
CC antiallergic, virucide, anti-HIV, immunosuppressive, anticonvulsant and
CC nephrotropic activities, and can be used in gene therapy, and for the
CC modulation (inhibition) of expression or activity of NF-kappaB by RNA
CC interference (siNA target mRNA, RNA splice variants, post-
CC transcriptionally modified RNA, pre-RNA and/or RNA templates). The siNA
CC sequences can be used to modulate expression of NF-kappaB genes, in
CC cells, tissue explants or organisms, e.g. by ex vivo gene therapy, in
CC grafts and transplants for treating restenosis and central nervous system
CC lesions and injuries (Alzheimer's, Parkinson's or Huntington's diseases,
CC epilepsy, dementia or amyotrophic lateral sclerosis) or for treating many
CC cancers, other proliferative diseases (restenosis and polycystic kidney
CC disease), inflammatory and/or allergic diseases, viral infections
CC (including HIV), autoimmune diseases and transplant rejection, and also
CC for drug screening; diagnosis; target identification and validation;
CC genetic engineering; pharmacogenomics; studying gene function and gene
CC mapping (e.g. of single-nucleotide polymorphisms). The present sequence
CC represents human v-rel reticuloendotheliosis viral oncogene homologue A
CC (REL-A) siNA, which is used in the exemplification of the present
CC invention. REL-A is a nuclear factor of the kappa light polypeptide gene
CC enhancer in B-cells.
XX
SQ Sequence 19 BP; 4 A; 6 C; 3 G; 0 T; 6 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 19;
Best Local Similarity 68.8%; Pred. No. 6.3e+02;
Matches 11; Conservative 4; Mismatches 1; Indels 0; Gaps 0;
QY 538 CCCATCTTTGACAGC 553
DB 1 CCCAUCUUUGACAUC 16
RESULT 570
ADA26032/c
ID ADA26032 standard; RNA; 19 BP.
XX
AC ADA26032;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human REL-A short interfering nucleic acid SEQ ID NO:167.
XX
KW short interfering nucleic acid; siNA; nuclear factor kappa B; NF-kappaB;
KW RNA interference; vasotropic; neurotropic; antiparkinsonian;
KW neuroprotective; cytosstatic; antiinflammatory; antiallergic; virucide;
KW anti-HIV; immunosuppressive; anticonvulsant; nephrotropic; gene therapy;
KW modulation; inhibition; restenosis; central nervous system lesion;
KW Alzheimer's disease; Parkinson's disease; Huntington's disease; epilepsy;
KW dementia; amyotrophic lateral sclerosis; cancer;
KW polycystic kidney disease; inflammatory disease; allergic disease;
KW viral infection; HIV; autoimmune disease; transplant rejection; ribozyme;
KW human; v-rel reticuloendotheliosis viral oncogene homologue A; REL-A;
KW nuclear factor; ss.
XX
OS Synthetic.
XX Homo sapiens.
XX
WO2003070970-A2.
XX
PD 29-AUG-2003.
XX
PF 20-FEB-2003; 2003WO-US004951.
XX
PR 20-FEB-2002; 2002US-0356580P.
PR 11-MAR-2002; 2002US-0363124P.

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PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI McSwiggen J, Beigelman L;
XX
XX WPI; 2003-689788/65.
XX
PT New short interfering nucleic acid downregulates expression of the NF-
PT kappaB gene useful e.g. for treatment and diagnosis of cancer and
PT inflammation.
XX
PS Example 3; Page 127; 149pp; English.
XX
CC The present invention describes a short interfering nucleic acid (siNA)
CC that downregulates expression of a nuclear factor kappa B (NF-kappaB)
CC gene by RNA interference. Also described: (1) kits for in vitro or in
CC vivo delivery of siNA; (2) conjugates and/or complexes of siNA; and (3)
CC vectors that express siNA. The siNAs have vasotropic, neurotropic,
CC antiparkinsonian, neuroprotective, cytosstatic, antiinflammatory,
CC antiallergic, virucide, anti-HIV, immunosuppressive, anticonvulsant and
CC nephrotropic activities, and can be used in gene therapy, and for the
CC modulation (inhibition) of expression or activity of NF-kappaB by RNA
CC interference (siNA target mRNA, RNA splice variants, post-
CC transcriptionally modified RNA, pre-RNA and/or RNA templates). The siNA
CC sequences can be used to modulate expression of NF-kappaB genes, in
CC cells, tissue explants or organisms, e.g. by ex vivo gene therapy, in
CC grafts and transplants for treating restenosis and central nervous system
CC lesions and injuries (Alzheimer's, Parkinson's or Huntington's diseases,
CC epilepsy, dementia or amyotrophic lateral sclerosis) or for treating many
CC cancers, other proliferative diseases (restenosis and polycystic kidney
CC disease), inflammatory and/or allergic diseases, viral infections
CC (including HIV), autoimmune diseases and transplant rejection, and also
CC for drug screening; diagnosis; target identification and validation;
CC genetic engineering; pharmacogenomics; studying gene function and gene
CC mapping (e.g. of single-nucleotide polymorphisms). The present sequence
CC represents human v-rel reticuloendotheliosis viral oncogene homologue A
CC (REL-A) siNA, which is used in the exemplification of the present
CC invention. REL-A is a nuclear factor of the kappa light polypeptide gene
CC enhancer in B-cells.
XX
SQ Sequence 19 BP; 6 A; 3 C; 6 G; 0 T; 4 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 6.3e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 538 CCCATCTTTGACAGC 553
DB 19 CCCATCTTTGACAATC 4
RESULT 571
AAQ30930/c
ID AAQ30930 standard; DNA; 20 BP.
XX
AC AAQ30930;
XX
DT 23-MAR-1993 (first entry)
XX
DE tdh 4.
XX
KW Vibrio parahaemolyticus; thermostable direct; haemolysin-related;
KW haemolysin gene; type 2; type 1; V.p; polymerase chain reaction; PCR;
KW primer; detection; ss.
XX
OS Synthetic.
XX
PN JF04293486-A.

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RESULT 577
AAT60442
ID AAT60442 standard; DNA; 20 BP.
XX AC AAT60442;
XX DT 09-JUL-1997 (first entry)
XX DE Tyrosine kinase Tnki primer A.
XX KW Tyrosine kinase; Tnki; signal transduction; cell transformation;
KW cell proliferation; haematopoietic cell; bone marrow; cancer;
KW gene therapy; diagnosis; polymerase chain reaction; PCR; primer;
KW rapid amplification of cDNA ends; 5' RACE; ss.
XX OS Synthetic.
XX PN WO9713846-A1.
XX PD 17-APR-1997.
XX PF 11-OCT-1996; 96WO-US016359.
XX PR 12-OCT-1995; 95US-0005286P.
XX PA (UJJO) UNIV JOHNS HOPKINS.
XX PI Civin CI, Small D, Hoehn GT;
XX DR WPI; 1997-235882/21.
XX PT Tnki intracellular tyrosine kinase and its splice variant - useful in
PT gene therapy to inhibit cell transformation, stimulate haematopoietic
PT cells etc. and for diagnosis.
XX PS Example 1; Page 34; 69pp; English.
XX CC PCR primers (AAT60438-43) were used in 5'RACE and 3'RACE amplifications
CC of K562 cell cDNA in order to isolate full-length clones for the novel
CC human intracellular tyrosine kinase Tnki (AAT60433) and for its splice
CC variant Tnki-alpha (AAT60434). Primer A (AAT60442) is specific for Tnki
CC and was used to identify Tnki sequences in 5'RACE products cloned into
CC vector TA
XX SQ Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 6.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX QY 1022 TCAAGCTGGCTGACTT 1037
DB 4 TCAAGCTGGCTGACTT 19
RESULT 578
AAT85490/C
ID AAT85490 standard; cDNA; 20 BP.
XX AC AAT85490;
XX DT 17-NOV-1997 (first entry)
XX DE Oligo #2 used to isolate hALR cDNA sequence.
XX KW Human; netrin; ATPase binding cassette transporter; ribosomal L3;
KW augmentor of liver regeneration; hNET; hABC3; SEM L3; hALR;
KW chromosome 16; exon trapping; axon; chicken; laminin domain; C. elegans;
KW UNC-6; cystic fibrosis; ss.
XX OS Synthetic.
XX PN WO9702346-A2.

XX 23-JAN-1997.
XX 17-JUN-1996; 96WO-US010469.
XX 30-JUN-1995; 95US-0000596P.
XX (GENZ) GENZYME CORP.
XX Landes GM, Burn TC, Connors TD, Dackowski WR, Klinger KW;
PI Van Raay TJ;
XX WPI; 1997-108959/10.
XX New isolated human chromosome 16 genes - encode netrin, ATPase binding
PT cassette transporter, ribosomal L3 sub-type or augmentor of liver
PT regeneration.
XX PS Claim 72; Page 66; 98pp; English.
XX The sequences given in AAT85489-90 are oligos which hybridise under
CC stringent conditions to the cDNA encoding the human augmentor of liver
CC regeneration protein (hALR). The hALR genomic sequence was isolated from
CC human chromosome 16 by exon trapping. hALR cDNA encodes a 119 amino acid
CC protein which is 84.8% identical and 94.1% similar to the rat ALR
CC protein. The hALR gene is specifically isolated from the chromosome
CC region 16p13.3
XX SQ Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 6.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX QY 1657 CACACCCCTCACAGGG 1672
DB 20 CACACTCTCACAGG 5
RESULT 579
AAT92765
ID AAT92765 standard; DNA; 20 BP.
XX AC AAT92765;
XX DT 05-FEB-1998 (first entry)
XX DE Primer #2 for immunoglobulin kappa variable region Vkappa1-2.
XX KW PCR primer; amplify; human gene; chimeric non-human animal; antibody;
KW transgenic mouse; chromosome fragment; hybridoma production; microcell;
KW Huntington's disease gene; pluripotent cell; interleukin-2 gene;
KW myeloma cell; immunoglobulin; variable region; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN WO9707671-A1.
XX PD 06-MAR-1997.
XX PF 29-AUG-1996; 96WO-JP002427.
XX PR 29-AUG-1995; 95JP-00242340.
XX PR 15-FEB-1996; 96JP-00027940.
XX PA (KIRI) KIRIN BEER KK.
XX PI Tomizuka K, Yoshida H, Hanaoka K, Oshimura M, Ishida I;
XX WPI; 1997-178822/16.
XX Chimeric animal containing foreign chromosome - for expression of a

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PT foreign gene, e.g. an antibody.
XX
PS Example 1; Page 21; 142pp; Japanese.
XX
CC AAT92758-792817 represent amplification primers for human genes which are
CC used in the chimeric non-human animal of the invention. The chimeric non-
CC human animal of the invention, preferably a mouse, contains a foreign
CC chromosome(s) or chromosome fragment. The animal is produced by combining
CC a hybrid cell by fusion of a cell containing the foreign chromosome with
CC a cell having the ability to form microcells. The microcells are
CC prepared, and fused with cells having differentiative pluripotency to
CC form cells having differentiative pluripotency and containing the foreign
CC chromosome. These cells are then introduced into an embryo, which is then
CC implanted and brought to term. The foreign chromosome segment is at least
CC 1 Mb long and preferably contains a region for an antibody. The
CC chromosome segment could also contain genes associated with human
CC disease, such as the interleukin-2 gene, and the Huntington's disease
CC gene. The expression of foreign genes (especially human genes) in a non-
CC human animal is useful for efficient production of proteins, especially
CC of human antibodies. Particular cells of the chimeric animal which
CC express the foreign genetic material can be isolated and fused with
CC myeloma cells to produce hybridomas capable of expressing the foreign
CC gene (e.g. to produce the antibody)
XX
SQ Sequence 20 BP; 4 A; 2 C; 9 G; 5 T; 0 U; 0 Other;
      Query Match      0.8%; Score 14.4; DB 1; Length 20;
      Best Local Similarity 93.8%; Pred. No. 6.7e+02;
      Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 356 CTGATGGGAGAGTGA 371
Db 5 CTGATGGTGAAGTGA 20
      ||||| ||||| |||||
      ||||| ||||| |||||

RESULT 580
AAV16342/c
ID AAX10122 standard; DNA; 20 BP.
XX
AC AAX10122;
XX
DT 24-MAR-1999 (first entry)
XX
DE Human biallelic polymorphic marker downstream primer #429.
XX
KW Polymorphism; biallelic; human; forensic; paternity testing; disease;
KW detection; phenotypic typing; characteristic; infection; hereditary;
KW autoimmune disease; cancer; inflammation; drug; therapy; medicament;
KW treatment; marker; primer; ss.
XX
OS Synthetic.
XX
OS Homo sapiens.
XX
PN WO9820165-A2.
XX
PD 14-MAY-1998.
XX
PF 05-NOV-1997; 97WO-US020313.
XX
PR 06-NOV-1996; 96US-0030455P.
XX
PA (WHEAT) WHITEHEAD INST BIOMEDICAL RES.
XX
PI Lander ES, Wang D, Hudson T;
XX
XX WPI; 1998-286974/25.
XX
PT New isolated nucleic acid segments from the human genome - used for
PT determining polymorphic forms for use in e.g. forensics, paternity
PT testing or phenotypic typing for disease.
XX
PS Claim 16; Page 202; 310pp; English.
XX

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CC AAX09121-X10268 are allele-specific oligonucleotide primers used in the
CC isolation of various biallelic polymorphic markers found in the human
CC genome (represented in AAX10269-X12937). These primers can be used in a
CC method for determining polymorphic forms in an individual for use in e.g.
CC forensics, paternity testing or for phenotypic typing for diseases such
CC as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
CC dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial
CC hypercholesterolemia, polycystic kidney disease, hereditary
CC spherocytosis, von Willebrand's disease, tuberculous sclerosis, Ehlers-Danlos
CC syndrome, osteogenesis imperfecta, acute intermittent porphyria,
CC autoimmune diseases, inflammation, cancer, diseases of the nervous
CC system, infection by pathogenic microorganisms, and characteristics such
CC as longevity, appearance (e.g. baldness, obesity), strength, speed,
CC endurance, fertility, and susceptibility or receptivity to particular
CC drugs or therapeutic treatments. The isolated polymorphic nucleic acid
CC segments can also be used to produce medicaments for the treatment or
CC prophylaxis of such diseases
XX
SQ Sequence 20 BP; 3 A; 5 C; 3 G; 9 T; 0 U; 0 Other;
      Query Match      0.8%; Score 14.4; DB 1; Length 20;
      Best Local Similarity 93.8%; Pred. No. 6.7e+02;
      Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 665 AAGCGAAAGCAGCT 680
Db 20 AAGCGAAAGCAGAT 5
      ||||| ||||| |||||
      ||||| ||||| |||||

RESULT 581
AAV16342/c
ID AAV16342 standard; DNA; 20 BP.
XX
AC AAV16342;
XX
DT 03-JUN-1998 (first entry)
XX
DE 3' RACE internal PCR primer used to clone the human ALR gene.
XX
KW Human; augmentor of liver regeneration; hAlR; treatment; modulation;
KW expression; antibody; identification; binding; substrate specificity;
KW ligand; exon trap; damaged liver; treatment; PCR primer; amplify; ss.
XX
OS Synthetic.
XX
OS Homo sapiens.
XX
PN WO9748797-Al.
XX
PD 24-DEC-1997.
XX
PF 16-JAN-1997; 97WO-US000785.
XX
PR 17-JUN-1996; 96US-00665259.
XX
PR 01-OCT-1996; 96US-00720814.
XX
PR 09-DEC-1996; 96US-00762500.
XX
PA (GENZ ) GENZYME CORP.
XX
PI Landes GM, Burn TC, Connors TD, Dackowski WR, Van Raay TJ;
PI Klingner KW;
XX
DR WPI; 1998-063138/06.
XX
XX Human chromosome 16 genes encoding netrin, ATP binding cassette
XX transporter, ribosomal L3 and augmentor of liver regeneration proteins -
XX useful for, e.g. treatment of liver disease and cystic fibrosis.
XX
PS Claim 80; Page 69; 220pp; English.
XX
CC Oligonucleotides AAV16341-42 are used to clone the human augmentor of
CC liver regeneration (hAlR) gene (see AAV16309). ALR is a growth factor
CC which augments the growth of damaged liver tissue while having no effect
CC

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CC on the resting liver. Rat ALR has been shown to be capable of augmenting
CC hepatocytic regeneration following hepatectomy. The antisense
CC oligonucleotides of the present sequence are used to modulate expression
CC of hALR and prevent its translation. Antibodies against hALR can be used
CC to block binding of its naturally occurring ligands. Host cells
CC containing vectors with DNA inserts encoding the protein can be used in a
CC method for identifying compounds which bind to hALR. hALR could be used
CC in the treatment of damaged liver

XX SQ Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 6.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1657 CACACCCCTCACAGG 1672
Dd 20 CACACTCTCACAGG 5

RESULT 582
AAV29622
ID AAV29622 standard; DNA; 20 BP.
XX AC AAV29622;
XX DT 19-AUG-1998 (first entry)
XX DE Human EP3 receptor cDNA amplifying primer 1.
XX KW Prostaglandin E2 receptor; EP3-V receptor; human; treatment;
KW inflammation; EP3-VI; PCR primer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN JP10113185-A.
XX PD 06-MAY-1998.
XX PF 14-OCT-1996; 96JP-00291150.
XX PR 14-OCT-1996; 96JP-00291150.
XX FA (ONOY) ONO PHARM CO LTD.
XX DR WPI; 1998-315474/28.
XX PT New human prostaglandin EP3 receptor(s) - useful for treatment and
PT prevention of, e.g. inflammation.
XX PS Example; Page 7; 27pp; Japanese.

CC This primer is used for the PCR amplification of the human EP3-V and EP3-
CC VI receptor cDNA sequences. A replication or expression vector comprising
CC cDNA sequences encoding EP-3V or EP3-3VI can be used to transform a host
CC cell. The host cell is cultured and the polypeptides can be recovered
CC from the culture medium. The polypeptides combine specifically with a
CC prostaglandin PGE2 receptor and can be used as a preventive and treating
CC agent for inflammation

XX SQ Sequence 20 BP; 5 A; 2 C; 10 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 6.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 347 AGATGGGGCTGTGATGG 362
Dd 2 AGATGGGGCTGTGATGG 17

RESULT 583

AAV52762
ID AAV52762 standard; DNA; 20 BP.
XX AC AAV52762;
XX DT 27-NOV-1998 (first entry)
XX DE Immunoglobulin kappa variable PCR primer Vkl-2 #2.

XX KW Pluripotent cell; intrinsic gene; chimeric non-human animal;
KW construction; human; antibiotic gene; cancer cell; embryonic; PCR primer;
KW ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN W09837757-A1.
XX PD 03-SEP-1998.
XX PF 02-MAR-1998; 98WO-JP000860.
XX PR 28-FEB-1997; 97JP-00062309.
XX FA (KIRI) KIRIN BEER KK.

XX KW Tomizuka K, Yoshida H, Hanaoka K, Oshimura M, Ishida I;
KW WPI; 1998-480821/41.
XX PT Pluripotent cells containing foreign chromosomes or fragments - and non-
PT human chimeric animals constructed using them and expressing foreign
PT genes such as human antibiotic genes.
XX PS Example 1; Page 34; 217pp; Japanese.

CC The present invention describes a method of obtaining pluripotent cells
CC containing foreign chromosomes or their fragments (preferably at least
CC 570 kb in length, especially more than 1000 kb) by preparing cancerous
CC cells containing the foreign chromosomes or fragments, then fusing these
CC with pluripotent cells such as embryonic stem cells, embryonic
CC reproductive cells, embryonic cancer cells or their mutants. Also
CC described are: (1) a method of obtaining hybridoma cells by fusing a cell
CC with a high ability to produce hybridoma cells (such as mouse A9 cells)
CC with a cell containing the foreign chromosomes or fragments (such as
CC normal human diploid cells); (2) a method of utilising pluripotent cells
CC to produce chimeric and transgenic non-human animals (especially mammals
CC such as mice) which can express the foreign chromosomes or fragments
CC introduced; and (3) chimeric animals, their offspring and tissues and
CC cells derived from the offspring produced by a method as in (2). The
CC inventions can be used for the production of monoclonal antibodies for
CC medical use which are of human type and therefore not antigenic in
CC humans. They can also be used in the production of chimeric and
CC transgenic animals which express useful foreign proteins, or which can
CC serve as models for the study of human diseases. AAV52755 to AAV52828 are
CC PCR primers used in examples from the present invention

XX SQ Sequence 20 BP; 4 A; 2 C; 9 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 6.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 356 CTGATGGGAGAGTGA 371
Dd 5 CTGATGGTGTGAGTGA 20

RESULT 584
AAV29918/C
ID AAV29918 standard; DNA; 20 BP.
XX AC AAV29918;

XX 06-JUL-1999 (first entry)
XX Primer 1192-1161 for PDZ domain-containing protein genes.
XX PDZ domain; gene expression; human umbilical vascular endothelial cell;
XX HUVEC; stimulation; tumour necrosis factor; TNF; protein binding; PCR;
XX cell; proliferation disorder; cancer; primer; amplification; ss.
XX Synthetic.
XX Homo sapiens.
XX WO9907846-A1.
XX 18-FEB-1999.
XX 12-AUG-1998; 98WO-JP003603.
XX 12-AUG-1997; 97JP-00230356.
XX 19-JUN-1998; 98JP-00189944.
XX (CHUG-) CHUGAI RES INST MOLECULAR MEDICINE INC.
XX Funahashi S, Miyata S;
XX WPI; 1999-167423/14.
XX Protein containing PDZ domain, whose expression is enhanced by TNF
XX stimulation - plays an important role in protein/protein interactions and
XX is used for screening for proteins for use in treatment of cell
XX proliferation disorders such as cancer.
XX Example 2; Page 29; 240pp; Japanese.
XX This sequence represents a primer used to amplify and isolate clones which
XX encode new proteins containing PDZ domains whose expression in human
XX umbilical vascular endothelial cells (HUVEC) are enhanced by stimulation
XX with tumour necrosis factor (TNF) alpha. The new protein is used to
XX identify proteins which bind to it (particularly to the PDZ domains) and
XX the genes encoding them, for use in the treatment of cell proliferation
XX disorders such as cancer
XX Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;
XX Query Match 0.8%; Score 14.4; DB 1; Length 20;
XX Best Local Similarity 93.8%; Pred. No. 6.7e+02;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 880 GACTGTGGGACATCA 895
XX 18 GACTGTGGGACCATCA 3
XX
XX RESULT 585
XX AAX29949/c
XX ID AAX29949 standard; DNA; 20 BP.
XX AC AAX29949;
XX XX
XX 06-JUL-1999 (first entry)
XX Primer 1192-1161 for PDZ domain-containing protein gene clone 32-8-1/5R3.
XX PDZ domain; gene expression; human umbilical vascular endothelial cell;
XX HUVEC; stimulation; tumour necrosis factor; TNF; protein binding; PCR;
XX cell; proliferation disorder; cancer; primer; amplification; ss.
XX Synthetic.
XX Homo sapiens.
XX WO9907846-A1.
XX 18-FEB-1999.
XX

XX 12-AUG-1998; 98WO-JP003603.
XX 12-AUG-1997; 97JP-00230356.
XX 19-JUN-1998; 98JP-00189944.
XX (CHUG-) CHUGAI RES INST MOLECULAR MEDICINE INC.
XX Funahashi S, Miyata S;
XX WPI; 1999-167423/14.
XX Protein containing PDZ domain, whose expression is enhanced by TNF
XX stimulation - plays an important role in protein/protein interactions and
XX is used for screening for proteins for use in treatment of cell
XX proliferation disorders such as cancer.
XX Example 2; Page 31; 240pp; Japanese.
XX This sequence represents a primer used to isolate the clone 32-8-1/5R3
XX which encodes a new protein containing PDZ domains whose expression in
XX human umbilical vascular endothelial cells (HUVEC) is enhanced by
XX stimulation with tumour necrosis factor (TNF) alpha. The new protein is
XX used to identify proteins which bind to it (particularly to the PDZ
XX domains) and the genes encoding them, for use in the treatment of cell
XX proliferation disorders such as cancer
XX Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;
XX Query Match 0.8%; Score 14.4; DB 1; Length 20;
XX Best Local Similarity 93.8%; Pred. No. 6.7e+02;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 880 GACTGTGGGACATCA 895
XX 18 GACTGTGGGACCATCA 3
XX
XX RESULT 586
XX AAA79747/c
XX ID AAA79747 standard; DNA; 20 BP.
XX AC AAA79747;
XX XX
XX 20-NOV-2000 (first entry)
XX Hepatitis B virus related oligonucleotide probe #10.
XX Hepatitis B virus; HBV; Hepatitis A virus; HAV; probe; detection;
XX mutation; high-density gene chip; ss.
XX Hepatitis B virus.
XX CN1252452-A.
XX 10-MAY-2000.
XX 24-SEP-1999; 99CN-00114460.
XX 24-SEP-1999; 99CN-00114460.
XX (UYDO-) UNIV DONGNAN.
XX Sun X, Lu Z, Wang Y;
XX WPI; 2000-443233/39.
XX High-density gene chip making process.
XX Example 1; Fig 15; 19pp; Chinese.
XX The present invention describes a method which comprises making a high-
XX density gene chip, specifically for making high-density micro-array of
XX

CC oligonucleotide probes. An oligonucleotide probe selecting process to
CC seek preferentially length variable and coverage variable probes is
CC provided to ensure identical cross melting temperature of probes to the
CC maximum limit, and this can make the cross control of gene chip
CC relatively simple and raise the reliability of the gene chip detecting
CC results. The process proposes a specific probe selection method for
CC detecting target sequence directly, detecting mutation in both specific
CC and non-specific sites and a probe overall arrangement scheme. AAA79738
CC to AAA80201 represent oligonucleotide probe sequences which are used in
CC examples from the present invention

XX
SQ Sequence 20 BP; 8 A; 1 C; 9 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 6.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 828 CCTCACCTTGTCCTT 843
Db 18 CCTAACCTTGTCCTT 3

RESULT 587
AAA09925
ID AAA09925 standard; DNA; 20 BP.

XX
AC AAA09925;
XX
DT 05-JUL-2000 (first entry)

DE Primer 2 for human immunoglobulin kappa variable region gene Vk1-2.

XX Foreign chromosome; microcell fusion; homologous recombination; antibody;
KW targeting vector; transgenic animal; disease model; knockout animal;
KW PCR primer; human; ss.

XX Homo sapiens.

OS

XX WO200010383-A1.

PN 02-MAR-2000.

XX 23-AUG-1999; 99WO-JP004518.

XX 21-AUG-1998; 98JP-00236169.

PA (KIRI) KIRIN BEER KK.

XX Tomizuka K, Yoshida H, Hanaoka K, Oshimura M, Ishida I;

PI Kuroiwa Y;

XX WPI; 2000-246479/21.

XX Producing a cell containing modified foreign chromosomes, useful for the

XX generation of transgenic animals.

XX Example 1; Page 55; 316pp; Japanese.

XX The invention relates to a novel method of producing cells containing a
CC modified foreign chromosome or chromosome fragment. The method comprises:
CC (a) fusing a microcell comprising the foreign chromosome or chromosome
CC fragment, with a cell having a high efficiency for homologous
CC recombination; (b) marking the desired site of insertion of the foreign
CC chromosome using a targeting vector; and (c) inducing deletion or
CC translocation at the marked site. Transgenic animals produced by the
CC method are useful to provide disease models and knockout animals, and in
CC the production of human proteins, particularly human antibodies. This
CC sequence is used in the method of the invention

XX Sequence 20 BP; 4 A; 2 C; 9 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 6.7e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 356 CTGATGGGAGAGTGA 371
Db 5 CTGATGGTGAAGTGA 20

RESULT 588
AAC67141/c
ID AAC67141 standard; DNA; 20 BP.

XX

AC AAC67141;

DT 03-APR-2001 (first entry)

XX Human E2F transcription factor 3 mRNA antisense sequence SEQ ID NO: 14.

XX Human; E2F transcription factor 3; antisense; E2F-3; cancer;

XX phosphorothioate backbone; infection; inflammation; PCR primer; ss.

XX Homo sapiens.

XX US6165791-A.

XX 26-DEC-2000.

XX 24-FEB-2000; 2000US-00513729.

XX 24-FEB-2000; 2000US-00513729.

XX (ISIS-) ISIS PHARM INC.

XX Popoff I, Wyatt J;

XX WPI; 2001-101698/11.

XX Novel antisense compounds targeted to E2F transcription factor 3 for

XX diagnosis, prophylaxis and treatment of diseases associated with E2F

XX transcription factor 3 such as infection, inflammation or tumor

XX formation.

XX Claim 14; Col 41-42; 41pp; English.

XX The present invention provides antisense oligonucleotides with

XX phosphorothioate backbones directed at the human E2F transcription factor

XX 3 (E2F-3) coding sequences. These can be used in the therapy of diseases

XX which can be treated by modulating E2F-3 expression and to prevent

XX infection, inflammation and tumour formation

XX Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;

Best Local Similarity 93.8%; Pred. No. 6.7e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 862 CTGAAGCAGTACCTGG 877

Db 16 CTGAGCAGTACCTGG 1

RESULT 589

AAF58946/c

ID AAF58946 standard; DNA; 20 BP.

XX

AC AAF58946;

XX 06-JUN-2001 (first entry)

XX V parahaemolyticus detection probe SEQ ID NO: 6.

XX Escherichia coli; Vibrio parahaemolyticus; Staphylococcus aureus;

XX food poisoning; probe; ss.

```
OS Vibrio parahaemolyticus.
XX
XX
XX EP1085100-A1.
XX
XX
XX 21-MAR-2001.
XX
XX 20-AUG-1992; 2000EP-00125531.
XX
XX 18-FEB-1992; 92JP-00030755.
XX
XX 24-MAR-1992; 92JP-00066082.
XX
XX 20-AUG-1992; 92EP-00307606.
XX
XX (SHMA ) SHIMADZU CORP.
XX
XX Ohashi T, Tada J, Fukushima S, Ozaki H, Nishimura N, Shirasaki Y;
XX Yamagata K;
XX WPI; 2001-246903/26.
XX
XX New oligonucleotides that are selectively hybridizable with the heat-
XX labile genes of toxigenic Escherichia coli, useful as primers for gene
XX amplification to detect E. coli in cases of food poisoning, diarrhea or
XX in food inspection.
XX
XX Example 2; Page 29; 122pp; English.
XX
XX The present invention provides a number of oligonucleotides which
XX selectively hybridise to either Vibrio parahaemolyticus, Escherichia coli
XX or Staphylococcus aureus genes. These organisms are associated with food
XX poisoning, and the sequences can be used to determine its cause and thus
XX determine the appropriate treatment. The present sequence is one of the
XX probes of the invention
XX
XX Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.4; DB 1; Length 20;
XX Best Local Similarity 93.8%; Pred. No. 6.7e+02;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 224 ATGAGAGTGGTGGTGG 239
DB 16 ATGAGAGTGGTGGTGG 1

RESULT 590
AAD17411
ID AAD17411 standard; DNA; 20 BP.
XX
XX AAD17411;
XX
XX 29-NOV-2001 (first entry)
XX
XX Human SFRP4 gene specific reverse RT-PCR primer.
XX
XX Secreted Frizzled-related protein; SFRP; chronic bronchitis; asthma;
XX chronic obstructive pulmonary disease; COPD; antisense therapy; human;
XX emphysema; reverse transcription PCR; RT-PCR primer; SFRP4 gene; ss.
XX
XX Homo sapiens.
XX
XX W0200164717-A1.
XX
XX 07-SEP-2001.
XX
XX 28-FEB-2001; 2001WO-US006579.
XX
XX 29-FEB-2000; 2000US-00514885.
XX
XX (UYCO ) UNIV COLUMBIA NEW YORK.
XX
XX D'armiento J, Imai K;
XX WPI; 2001-557764/62.
XX
```

```
XX Inhibition of apoptosis for the treatment or prevention of obstructive
XX pulmonary disease comprises inhibiting expression of secreted Frizzled-
XX related protein gene in lung cells.
XX
XX Example 2; Page 35; 79pp; English.
XX
XX The present sequence is human secreted Frizzled-related protein 4 (sFRP4)
XX gene specific reverse transcription PCR (RT-PCR) primer. The invention
XX relates to a method for treating or preventing chronic obstructive
XX pulmonary disease (COPD) such as emphysema, asthma and chronic bronchitis
XX in a subject. The method involves administering to the subject, an agent
XX effective to inhibit apoptosis by inhibiting the expression of a secreted
XX Frizzled-related protein (sFRP) gene. It is also useful in antisense
XX therapy
XX
XX Sequence 20 BP; 6 A; 3 C; 6 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.4; DB 1; Length 20;
XX Best Local Similarity 93.8%; Pred. No. 6.7e+02;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 335 ACGAGGACTTGAAGAT 350
DB 2 ATGAGGACTTGAAGAT 17

RESULT 591
AAF58888/c
ID AAF58888 standard; DNA; 20 BP.
XX
XX AAF58888;
XX
XX 06-JUN-2001 (first entry)
XX
XX V parahaemolyticus detection probe SEQ ID NO: 6.
XX
XX Escherichia coli; Vibrio parahaemolyticus; Staphylococcus aureus;
XX food poisoning; probe; ss.
XX
XX Vibrio parahaemolyticus.
XX
XX EP1085101-A2.
XX
XX 21-MAR-2001.
XX
XX 20-AUG-1992; 2000EP-00125532.
XX
XX 18-FEB-1992; 92JP-00030755.
XX
XX 24-MAR-1992; 92JP-00066082.
XX
XX 20-AUG-1992; 92EP-00307606.
XX
XX (SHMA ) SHIMADZU CORP.
XX
XX Ohashi T, Tada J, Fukushima S, Ozaki H, Nishimura N, Shirasaki Y;
XX Yamagata K;
XX WPI; 2001-246904/26.
XX
XX New oligonucleotides that are selectively hybridizable with the
XX thermostable enterotoxin genes of enterotoxigenic Escherichia coli,
XX useful as primers for gene amplification to selectively detect E. coli in
XX cases of food poisoning.
XX
XX Example 2; Page 29; 120pp; English.
XX
XX The present invention provides a number of oligonucleotides which
XX selectively hybridise to either Vibrio parahaemolyticus, Escherichia coli
XX or Staphylococcus aureus genes. These organisms are associated with food
XX poisoning, and the sequences can be used to determine its cause and thus
XX determine the appropriate treatment. The present sequence is one of the
XX probes of the invention
XX
```

```
SQ Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 6.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 224 ATGAGAGTGGTGGTGG 239
DB 16 ATGAGAGTGGTAGTGG 1

RESULT 592
AAH22485
XX AAH22485 standard; DNA; 20 BP.
AC AAH22485;
XX
XX
XX 22-AUG-2001 (first entry)
DT
DE Rice promoter specific primer SR15.
XX
XX Transplastome; plastome; plastid; chloroplast; transgene; plant;
KW psbA gene; PCR primer; ss.
XX
XX Oryza sativa.
OS
XX WO200142441-A2.
PN
PD 14-JUN-2001.
XX
XX 08-DEC-2000; 2000WO-EP012446.
PF
XX 08-DEC-1999; 99GB-00029075.
PR 14-JUL-2000; 2000GB-00017369.
XX
XX (ITGE-) INT CENT GENETIC ENG & BIOTECHNOLOGY.
PA
XX Reddy S, Sadhu L, Shukla V, Ferraiolo G;
PI WPI; 2001-381671/40.
XX
XX Obtaining a stable transplastome for producing a transplastomic cell,
PT plant or seed, comprises transforming a recipient plastome with a
PT polynucleotide comprising a 5' and 3' sequence homologous to the
PT recipient.
XX
XX Example 8; Page 113; 128pp; English.
XX
XX The invention relates to a method of obtaining a stable transplastome, by
CC transforming a recipient plastome (RP) with a polynucleotide having a 5'
CC sequence homologous to a region of RP, and joined to it, a sequence
CC heterologous to RP comprising a coding region operably linked to
CC regulatory region capable of securing expression of coding region in the
CC plastid and joined to it, and a 3' sequence homologous to a region of RP.
CC The method is useful for obtaining a transplastomic plastid, by
CC transforming a plastome within a plastid such as proplastid, amyloplast,
CC chloroplast, etioplast or leucoplast, preferably chloroplast. The method
CC is useful for obtaining a transplastomically expressed protein. The
CC method provides high, uniform, reliable expression of transgenes in
CC plants, with stable inheritance of the trait by avoiding the potential
CC for the dangerous spread of transgene to the ecosystem. The present
CC sequence represents a PCR primer used in primer extension assays for
CC analysis of transcription initiation from rice promoters in tobacco
CC chloroplasts
XX
XX Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 6.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1186 ATGCCACAGGCGTC 1201
DB 16 ATGAGAGTGGTAGTGG 1
```

```
Db 1 ATGCCACAGGCGTC 16

RESULT 593
AAC92716
ID AAC92716 standard; DNA; 20 BP.
XX
XX AAC92716;
XX
XX 27-MAR-2001 (first entry)
DT
XX Human Nck-2 phosphorothioate antisense oligonucleotide, SEQ ID NO:77.
DE
XX Human Nck-2; adapter protein; Nck adapter protein; hNck-beta; Grb4;
KW signal transduction; SH2 domain; SH3 domain; src homology domain;
KW integrin signalling; receptor tyrosine kinase signalling;
KW growth factor receptor signalling; PINCH; v-Abl; Ras; Sos;
KW transcriptional activation; cancer; tumour; leukaemia; breast cancer;
KW expression inhibition; phosphorothioate; antisense oligonucleotide; ss.
XX
XX Homo sapiens.
OS
XX US6165728-A.
FN
XX 26-DEC-2000.
PD
XX 19-NOV-1999; 99US-00444053.
PF
XX 19-NOV-1999; 99US-00444053.
PR
XX (ISIS-) ISIS PHARM INC.
PA
XX Ward DT, Cowse LT;
PI WPI; 2001-090480/10.
XX
XX Novel antisense compound which inhibits expression of human nck-2 useful
PT for treating disease or condition associated with expression of nck-2,
PT and as research reagents, kits and diagnostics.
XX
XX Claim 1; Col 41-42; 38pp; English.
XX
XX Sequences AAC92649-C92728 represent antisense oligonucleotides targeted
CC to the human Nck-2 gene, which inhibit its expression. The antisense
CC oligonucleotides were designed to target different regions of the human
CC Nck-2 mRNA, and were analysed for their effect on Nck-2 mRNA levels by
CC quantitative real-time PCR. Nck-2 (also known as Nck adapter protein,
CC hNck-beta and Grb4), contains both SH2 and SH3 src homology domains and
CC functions as an adapter protein in integrin-mediated and receptor
CC tyrosine kinase-mediated signal transduction, particularly in growth
CC factor receptor signalling. Moreover, Nck-2 participates in pathways that
CC connect growth factor receptor signalling and integrin signalling via its
CC interaction with PINCH, a LIM domain-containing adapter protein which is
CC involved in integrin, growth factor and Wnt signalling pathways. Nck-2
CC also interacts with EGF (epidermal growth factor) and PDGF (platelet-
CC derived growth factor) receptors inhibiting EGF- and PDGF-stimulated DNA
CC synthesis in an SH2-dependent manner. Nck-2 is also able to interact with
CC v-Abl, Ras and Sos proteins to induce transcriptional activation, and is
CC therefore implicated in the development of cancer, particularly leukaemia
CC and breast cancer. The oligonucleotides of the invention are useful for
CC diagnosis, prevention and treatment of conditions associated with Nck-2
CC expression, such as leukaemia and breast cancer
XX
XX Sequence 20 BP; 5 A; 4 C; 9 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 6.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 815 ACACGGAGAGTCCCT 830
DB 4 ACACGGAGAGTCCCT 19
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RESULT 594
AAF79782/C
ID AAF79782 standard; DNA; 20 BP.
XX
XX
AC AAF79782;
XX
DT 29-MAY-2001 (first entry)
XX
DE V parahaemolyticus gene specific probe SEQ ID NO: 6.
XX
XX Vibrio parahaemolyticus; Escherichia coli; Staphylococcus aureus;
KW food poisoning; selective probe; ss.
XX
OS Vibrio parahaemolyticus.
XX
PN EP1085099-A2.
XX
PD 21-MAR-2001.
XX
PF 20-AUG-1992; 2000EP-00125530.
XX
PR 18-FEB-1992; 92JP-00030755.
PR 24-MAR-1992; 92JP-00065082.
PR 20-AUG-1992; 92EP-00307606.
XX
PA (SHMA ) SHIMADZU CORP.
XX
XX Ohashi T, Tada J, Fukushima S, Ozaki H, Nishimura N, Shirasaki Y;
PI Yamagata K;
PI
XX
DR WPI; 2001-259596/27.
XX
XX New oligonucleotides that are selectively hybridizable with the entA, B,
PT C, D or E gene of Staphylococcus aureus, useful as primers for gene
PT amplification to selectively detect S. aureus in cases of food poisoning
PT or in food inspection.
XX
XX Example 2; Page 29; 121pp; English.
XX
XX The present invention provides the sequences of a number of
CC oligonucleotides which selectively hybridise to the Staphylococcus aureus
CC enterotoxin A, B, C, D or E genes, also provided are the sequences of
CC probes for Escherichia coli and Vibrio parahaemolyticus genes. These are
CC useful in the identification of the cause of food poisoning in humans,
CC and in food inspection procedures
XX
XX Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 6.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 224 ATGAGAGTGGTGGTGG 239
DB 16 ATGAGAGTGGTAGTGG 1
RESULT 595
ABA81723
ID ABA81723 standard; DNA; 20 BP.
XX
XX
AC ABA81723;
XX
DT 25-JAN-2002 (first entry)
XX
DE PCR primer KP139.
XX
XX Aldehyde-dehydrogenase; enzyme; phenanthrene; anthracene; PCR primer;
KW aromatic dihydrodiol dehydrogenase; aromatic diol oxygenase;
KW hydratase-aldoase; ss.
XX
XX Nocardioides sp. KP7.
XX
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XX
PN JP2001245662-A.
XX
PD 11-SEP-2001.
XX
PF 03-MAR-2000; 2000JP-00059523.
XX
PR 03-MAR-2000; 2000JP-00059523.
XX
PA (KAIY-) KAIYO BIOTECHNOLOGY KENKYUSHO KK.
XX
DR WPI; 2002-002935/01.
XX
XX Genes and proteins involved in the upstream of the pathway of degradation
PT of a polycyclic aromatic compound.
XX
XX Example 4; Page 7; 47pp; Japanese.
XX
XX The present invention relates to coding sequences for proteins such as
CC aromatic dihydrodiol dehydrogenase, aromatic diol oxygenase, hydratase-
CC aldoase and aldehyde-dehydrogenase (ABA01198-ABA01201 and AAM52344-
CC AAM52347), which are involved in the degradation of polycyclic aromatic
CC compounds. The enzymes are useful as reagents for converting the
CC metabolite intermediates of polycyclic aromatic compounds such as
CC phenanthrene and anthracene. The present sequence is a PCR primer, which
CC was used in an example from the present invention
XX
XX Sequence 20 BP; 1 A; 9 C; 4 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 6.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 921 CCTGTTCCAGCTGCTC 936
DB 1 CCTGTTCCAGCTGCTC 16
RESULT 596
AAD29525
ID AAD29525 standard; DNA; 20 BP.
XX
XX
AC AAD29525;
XX
DT 07-MAY-2002 (first entry)
XX
XX Primer #13 related to the method of producing a desired protein.
DE Transgenic plant; transplastomic plant; medicament; primer; ss.
XX
XX Unidentified.
OS
XX WO200206497-A2.
PN
PD 24-JAN-2002.
XX
XX 13-JUL-2001; 2001WO-EP008132.
PF
XX 14-JUL-2000; 2000GB-00017397.
PR
XX (ITGE-) INT CENT GENETIC ENG & BIOTECHNOLOGY.
PA
XX Reddy VS, Sadhu L;
PI
XX WPI; 2002-171810/22.
DR
XX Producing a protein of interest, e.g., a pharmaceutically active protein,
PT comprises expressing a polynucleotide fusion construct in a plasmid and
PT producing a fusion protein comprising the protein of interest.
XX
XX Disclosure; Page 75; 92pp; English.
PS
XX The patent discloses a method of producing a protein of interest which
CC
```


CC involves expressing a polynucleotide fusion construct in a plasmid to
CC produce a fusion protein comprising the protein of interest where the
CC construct comprises a polynucleotide coding sequence of the protein of
CC interest operably linked to a polynucleotide coding sequence of a fusion
CC protein partner. The methods of the invention are useful for producing a
CC protein of interest which comprises a human protein or its biologically
CC active variant or fragment, a pharmaceutically active protein, an IFN-
CC (interferon), its biologically active variant or fragment, a human IFN-
CC gamma or its biologically active variant or fragment. They are useful for
CC the production of transgenic plants. Methods of the invention are also
CC useful for the generation of transplasmidic plant cells, plants and
CC seeds. The protein of interest obtained by the methods of the invention
CC is useful for the manufacture of a medicament for treating a disease
CC condition. The present DNA sequence is a primer related to the method of
CC producing a protein of interest

XX SQ Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 6.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1186 ATGGCCACAGCGGTC 1201
Db 1 ATGCCACAGCGGTC 16
|||||

RESULT 597

ABZ31353
ID ABZ31353 standard; DNA; 20 BP.

AC ABZ31353;

DT 30-JAN-2003 (first entry)

DE Candida albicans GRACE strain PCR primer SEQ ID NO 5572.

XX Fungus; Yeast; tetracycline; promoter; GRACE strain; biosynthesis;
XX signal transduction; DNA replication; cell division; growth;
XX proliferation; Candida albicans; fungicide; antifungal; PCR; primer; ss.
XX Candida albicans.

XX WO200253728-A2.

XX 11-JUL-2002.

XX 26-DEC-2001; 2001WO-US049486.

XX 29-DEC-2000; 2000US-0259128P.

XX 20-FEB-2001; 2001US-00792024.

XX 22-AUG-2001; 2001US-0314050P.

XX (ELIT-) ELITRA PHARM INC.

XX Roemer T, Jiang B, Boone C, Bussey H, Ohlsen KL;

XX WPI; 2002-566694/60.

XX Constructing strains for identifying gene products as effective targets
XX for therapeutic intervention, by inactivating in the strain one allele of
XX a gene and placing other allele of the gene under conditional expression.

XX Claim 36; SEQ ID NO 5572; 167bp + Sequence Listing; English.

XX The invention relates to constructing (M1) a strain of diploid fungal
XX cells in which both alleles of a gene are modified, comprising modifying
XX one allele by insertion or replacement by a cassette having an
XX expressible selectable marker and modifying other allele by
XX recombination, of a promoter replacement fragment with a heterologous
XX promoter, so that expression of the second allele is regulated by the
XX promoter. (M1) is useful for constructing a strain of diploid fungal
XX cells in which both alleles of a gene are modified. The diploid fungal

CC cells having both alleles modified are useful for identifying a gene that
CC is essential to the survival or growth of a fungus, a gene that
CC contributes to the virulence and/or pathogenicity of a fungus, a gene
CC that contributes to the resistance of a diploid fungus to an antifungal
CC agent, an antifungal agent that inhibits the growth of a diploid fungus
CC and for identifying a therapeutic agent for treatment of a mammalian
CC disease. (M1) is useful for identifying a compound which modulates the
CC activity of a gene product, preferably enzymatic activity, carbon
CC compound catabolism, biosynthetic, transporter, transcriptional,
CC translational, signal transduction, DNA replication and cell division
CC activity. The method is useful for identifying a compound having the
CC ability to inhibit growth or proliferation of C. albicans cells and for
CC treating infection by C. albicans. The present sequence is that of a PCR
CC primer used in the method of the invention. Note: The sequence data for
CC this patent is not represented in the printed specification but is based
CC on sequence information supplied to Derwent by the European Patent Office

XX SQ Sequence 20 BP; 1 A; 1 C; 11 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 6.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 230 GTGGTGGTGGCGG 245
Db 4 GTGGTGGTGGTGG 19
|||||

RESULT 598

ABS73431/C
ID ABS73431 standard; DNA; 20 BP.

AC ABS73431;

DT 03-DEC-2002 (first entry)

XX Chimeric phosphorotioate oligonucleotide #12.

XX Human; glioma-associated oncogene-2; antisense compound; infection;
XX inflammation; tumor formation; antiinflammatory; antitumor;
XX inhibitor of human glioma-associated oncogene-2 expression;
XX antisense gene therapy; phosphorothioate; ss.

XX Homo sapiens.

XX Synthetic.

XX Chimeric.

XX US6440739-B1.

XX 27-AUG-2002.

XX 17-JUL-2001; 2001US-00907843.

XX 17-JUL-2001; 2001US-00907843.

XX (ISIS-) ISIS PHARM INC.

XX Bennett CF, Freier SM;

XX WPI; 2002-697096/75.

XX Novel antisense compound that hybridizes and inhibits nucleic acid
XX encoding human glioma-associated oncogene-2, useful for treatment of
XX diseases associated with human glioma-associated oncogene-2.

XX Example 15; Col 45; 43pp; English.

XX The present invention relates to a new antisense compound targeted to
XX human glioma-associated oncogene-2. The invention is useful for
XX inhibiting the expression of human glioma-associated oncogene-2 in cells
XX or tissues. The invention is also useful for treatment of diseases
XX associated with human glioma-associated oncogene-2. The invention is
XX further useful for diagnostics, therapeutics, prophylaxis, as research

CC reagents and kits, for distinguishing functions of various members of a
 CC biological pathway, and in antisense gene therapy. The invention is also
 CC useful prophylactically, e.g., to prevent or delay infection,
 CC inflammation or tumour formation. The present nucleic acid sequence
 CC represents an oligonucleotide that was used in the methods of the
 CC invention to inhibit human glioma-associated oncogene-2
 XX
 XX Sequence 20 BP; 2 A; 4 C; 9 G; 5 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 6.7e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1537 AAGGAGCCAGCCTTC 1552
 Db 18 AAGGAGCCAGCCTTC 3
 RESULT 599
 ABI93000
 ID ABI93000 standard; DNA; 20 BP.
 XX
 AC ABI93000;
 XX
 XX 15-FEB-2002 (first entry)
 DT
 DE Capture oligonucleotide Zip ID#87 oligo #9.
 XX
 XX Human; K-ras; PCR primer; probe; capture probe; mutation detection;
 KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
 KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
 KW oncogene; tumour suppressor; human papillomavirus; forensic;
 KW environmental monitoring; food industry; feed industry; ss.
 XX
 OS Synthetic.
 XX
 XX WO200179548-A2.
 PN
 XX 25-OCT-2001.
 PD
 XX 04-APR-2001; 2001WO-US010958.
 PF
 XX 14-APR-2000; 2000US-0197271P.
 PR
 XX (CORR) CORNELL RES FOUND INC.
 PA
 XX Barany F, Zilvi M, Gerry NP, Favis R, Kluman R;
 PI
 XX WPI; 2002-034366/04.
 DR
 XX Designing capture oligonucleotide probes for use on a support to which
 PT complementary oligonucleotides hybridize with little mismatch.
 PS
 XX Example 5; Fig 29; 300pp; English.
 CC
 CC The present invention describes a method (M1) for designing capture
 CC oligonucleotide probes (I) for use on a support to which complementary
 CC oligonucleotide probes (II) will hybridize with little mismatch, where
 CC (I) have melting temperatures within a narrow range. The method is useful
 CC for detecting infectious diseases caused by bacterial infectious agents
 CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
 CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and
 CC Aspergillus fumigatus, viruses e.g. T-cell lymphotrophic virus,
 CC Epstein-Barr virus and polio virus, and parasitic infectious agents
 CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
 CC medinensis. The method is also useful for detecting genetic diseases such
 CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
 CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes
 CC involved in DNA amplification, replication, recombination or repair, the
 CC cancer is specifically associated with a gene selected from BRCA1 gene,
 CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
 CC method is also used for environmental monitoring, forensics and the food
 CC and feed industry, detecting comprises scanning (using e.g. a scanning

CC electron microscope and infrared microscope) the support at the
 CC particular sites and identifying if ligation of the oligonucleotide probe
 CC sets occurred and correlating (using a computer) identified ligation to a
 CC presence or absence of the target nucleotide sequences. ABI82074 to
 CC ABI97546 represent oligonucleotide sequences used in the exemplification
 CC of the present invention
 XX
 XX Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 6.7e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 844 GAGTACTGGACACGG 859
 Db 5 GAGTACTGGACACGG 20
 RESULT 600
 ABZ84889
 ID ABZ84889 standard; DNA; 20 BP.
 XX
 AC ABZ84889;
 XX
 XX 17-OCT-2003 (first entry)
 DT
 DE Human oligonucleotide sequence.
 XX
 XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antialshmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX
 OS Homo sapiens.
 XX
 XX WO200285308-A2.
 PN
 XX 31-OCT-2002.
 PD
 XX 23-APR-2002; 2002WO-US013135.
 PF
 XX 24-APR-2001; 2001US-0286137P.
 PR
 XX (BPIG-) EPIGENESIS PHARM INC.
 PA
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 DR WPI; 2003-229219/22.
 XX
 XX Pharmaceutical composition for treating ailments associated with impaired
 XX respiration, has oligo(s) antisense to specific gene(s) or its
 XX corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 XX ubiquinone.
 PS
 XX Claim 15; SEQ ID NO 131; 872pp; English.
 CC
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antisthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine

CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 20 BP; 10 A; 2 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 6.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 133 ATGAAGAAGATCAAC 148
|||||
Db 2 ATGAAGTAGATCAAC 17

RESULT 601
ABZ87510/C
ID ABZ87510 standard; DNA; 20 BP.

XX AC ABZ87510;

XX DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.

XX PS Disclosure; SEQ ID NO 2752; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine

CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 20 BP; 2 A; 8 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 6.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 713 GACTGGAACATGAAGA 728
|||||
Db 16 GGCTGGAACATGAAGA 1

RESULT 602
ABZ85016/C

ID ABZ85016 standard; DNA; 20 BP.

XX AC ABZ85016;

XX DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.

XX PS Claim 15; SEQ ID NO 258; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine

CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 6 A; 3 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 6.7e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1171 TGCATCTCTATGAGA 1186
 |||||
 Db 20 TGCATCTCTATGAGA 5

RESULT 603

ABZ77435
 ID ABZ77435 standard; DNA; 20 BP.

XX
 AC ABZ77435;

DT 28-MAY-2003 (first entry)

XX PCR primer used to amplify Ngn2 cDNA.

DE Immortalized cell; progenitor cell; neural progenitor cell; brain injury;
 KW spinal cord injury; Ngn2; PCR; primer; ss.
 KW
 OS Synthetic.

XX W2003014320-A2.

XX 20-FEB-2003.

XX 09-AUG-2002; 2002WO-US025389.

XX 10-AUG-2001; 2001US-0311626P.

XX (CORR) CORNELL RES FOUND INC.

XX Goldman SA, Roy NS;

XX WPI; 2003-256571/25.

XX Immortalizing neural progenitor cells useful in treating injuries (e.g.
 PT brain or spinal cord injuries), comprises providing a population of
 PT progenitor cells and immortalizing the cells before or after they are
 PT enriched or purified.

XX Example 5; Page 23; 55pp; English.

XX The specification describes a method of immortalizing progenitor cells,
 CC including neural progenitor cells. The method comprises providing a
 CC population of progenitor cells and immortalizing the population of the
 CC progenitor cells either before or after they are enriched or purified.
 CC The method is useful in immortalizing neural progenitor cells that may be
 CC used in treating injuries (e.g. brain or spinal cord injuries) and other
 CC diseases. PCR primers ABZ77435-36 were used to amplify cDNA encoding Ngn2
 CC from immortalized cells of the invention

XX Sequence 20 BP; 5 A; 8 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 6.7e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1675 GCCCCCACTACATCT 1690
 |||||
 Db 4 GCCCCCACTACATCT 19

RESULT 604
 ADC65809/c
 ID ADC65809 standard; DNA; 20 BP.
 XX
 AC ADC65809;

DT 18-DEC-2003 (first entry)

XX Mouse TGF-beta receptor II targeted antisense oligonucleotide #8.
 DE mouse; antisense oligonucleotide;
 XX transforming growth factor beta receptor II; TGF-beta receptor II;
 KW hyperproliferative disorder; breast cancer; autoimmune disorder;
 KW rheumatoid arthritis; 2'-O-methoxyethyl gapmer;
 KW phosphorothioate backbone; ss; murine.

XX Mus musculus.

XX W2003000656-A2.

XX 03-JAN-2003.

XX 19-JUN-2002; 2002WO-US019665.

XX 21-JUN-2001; 2001US-00888361.

XX (ISIS-) ISIS PHARM INC.

XX Murray SF, Wyatt JR;

XX WPI; 2003-175279/17.

XX New compound having a sequence targeted to a nucleic acid encoding
 PT transforming growth factor beta-receptor II, useful for preparing a
 PT composition for treating hyperproliferative disorder e.g., lung, liver,
 PT colon or gastric cancer.

XX Claim 3; SEQ ID NO 105; 141pp; English.

XX The invention comprises antisense oligonucleotides that are targeted to
 CC the nucleic acid encoding transforming growth factor beta (TGF-beta)
 CC receptor II. The antisense oligonucleotides of the invention are useful
 CC for treating: hyperproliferative disorders (e.g. breast cancer); or an
 CC autoimmune disorder (e.g. rheumatoid arthritis). The present DNA sequence
 CC represents a 2'-O-methoxyethyl gapmer oligonucleotide with a
 CC phosphorothioate backbone that is targeted to mouse TGF-beta receptor II.

XX Sequence 20 BP; 4 A; 10 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 6.7e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 930 GCTGCTCCGTGGCGCTG 945

Db 19 GCTGCTCCGTGGCGCTG 4

RESULT 605

AAQS0630/c

ID AAQS0630 standard; DNA; 21 BP.

XX

AC AAQS0630;

XX

DT 03-JUN-1994 (first entry)

XX NANBHV primer.

DE NANBHV primer.

XX NANBHV; non-A non-B hepatitis virus; prophylaxis; liver; serum;

XX chimpanzee; clone; kit; ss.

XX Synthetic.

OS

XX JP05284969-A.
XX
XX
XX
XX 02-NOV-1993.
XX
XX 09-APR-1992; 92JP-00088840.
XX
XX 09-APR-1992; 92JP-00088840.
XX
XX (DAUC) DAIICHI KAGAKU YAKUHIN KK.
XX (DAUC) DAIICHI PHARM CO LTD.
XX
XX WPI; 1993-382212/48.
XX
XX Hepatitis virus gene for corresp. polypeptide - used in treatment and
PT prophylaxis of non-A, non-B-hepatitis, for encoding specified base
PT aminoacid sequence.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX The DNA sequences (AAQ50623-28) are obtained by extracting RNA from liver
CC or serum of a patient or chimpanzee infected with NANBH, synthesising
CC cDNA and detecting the gene fragment which is negative to anti-HCV
CC antibody and cloning the fragment. The derived proteins (AAQ4404-08) can
CC be used to detect NANBH. The DNA and protein are useful in the treatment
CC or prophylaxis of non-A, non-B hepatitis. The primers (AAQ50629-30) are
CC used in the amplification process
XX
XX Sequence 21 BP; 5 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.4; DB 1; Length 21;
Best Local Similarity 93.8%; Pred. No. 7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 883 TGTGGGAACATCATCA 898
DB 17 TGTGGGAACATCATCA 2
RESULT 606
AAV57643/C
ID AAV57643 standard; DNA; 21 BP.
XX
XX AAV57643;
XX
XX 27-NOV-1998 (first entry)
XX
XX Exon 5 of an ENaC subunit amplifying forward primer B-6.
XX
XX Epithelial sodium channel; ENaC; mutation; pathological condition;
KW ion transport; water retention; blood pressure; metabolic acidosis;
KW chronic respiratory disease; inflammation; human; PCR primer; ss.
XX
XX Synthetic.
OS
OS Homo sapiens.
XX
XX WO9840516-A1.
XX
XX 17-SEP-1998.
XX
XX 11-MAR-1998; 98WO-US004681.
XX
XX 11-MAR-1997; 97US-0040171P.
XX
XX (UYUA) UNIV YALE.
XX
XX Lifton RP, Chang SS, Rossier BC;
PI
XX
XX WPI; 1998-506740/43.
XX
XX Determination of presence of mutation conferring pathological condition
PT mediated by altered ion transport - comprises analysing sample for
PT presence of mutation of potassium ion channel gene, ENaC, or in its

PT encoded protein.
XX
XX Example 1; Page 38; 56pp; English.
XX
XX Sequences shown in AAV57601 to AAV57686 represent primers used for the
CC PCR amplification of the exons of the different subunits of the human
CC epithelial sodium channel (ENaC) gene. This is used in the method of the
CC invention of determining the presence or absence of a mutation conferring
CC a pathological condition mediated by altered ion transport. The method
CC comprises analysing a nucleic acid sample, or protein sample, for the
CC presence of a mutation in the ENaC gene, or in its encoded protein. A
CC vector containing a nucleic acid encoding a human altered variant of the
CC ENaC protein can be used to transform host cells to produce an altered
CC variant of an ENaC protein. The protein can be used to identify agents
CC that effect ion transport. The agonists can be used to treat pathological
CC conditions resulting from abnormal ion transport, such as water
CC retention, increased blood pressure, chronic respiratory and metabolic
XX acidosis and inflammation
XX
XX Sequence 21 BP; 3 A; 14 C; 2 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.4; DB 1; Length 21;
Best Local Similarity 93.8%; Pred. No. 7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1158 GTGGGGTGTGGGGTGC 1173
DB 17 GTGGGGTGTGGGGTGC 2
RESULT 607
AAF96904
ID AAF96904 standard; DNA; 21 BP.
XX
XX AAF96904;
XX
XX 06-JUN-2001 (first entry)
XX
XX Human gene single nucleotide polymorphism #1665.
XX
XX Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
KW polymorphism; vascular disease; coronary artery disease; forensics;
KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
KW pulmonary embolism; paternity test; ds.
XX
XX Homo sapiens.
OS
OS Key Location/Qualifiers
FT Variation replace(11,G)
FT /tag a
FT /standard_name= "single nucleotide polymorphism"
XX
XX WO200118250-A2.
XX
XX 15-MAR-2001.
XX
XX 07-SEP-2000; 2000WO-US024503.
XX
XX 10-SEP-1999; 99US-0153357P.
XX 26-JUL-2000; 2000US-0220947P.
XX 16-AUG-2000; 2000US-0225724P.
XX
XX (WHED) WHITEHEAD INST BIOMEDICAL RES.
XX (MILL-) MILLENNIUM PHARM INC.
XX
XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JJ;
PI
XX WPI; 2001-226749/23.
XX
XX Nucleic acids comprising single nucleotide polymorphisms, useful in
PT applications such as forensics, paternity testing, medicine, genetic
PT analysis and phenotype correlations to diseases such as diabetes and
PT atherosclerosis.

XX Example; Page 160; 242pp; English.

XX The present invention provides a method of diagnosing a vascular disease

XX in an individual, involving determining the sequence at various

XX polymorphic sites within the human thrombospondin 1 and thrombospondin 4

XX genes. The sequences at a number of polymorphic sites are also provided

XX in the specification. In particular, the method can be used in the

XX diagnosis of atherosclerosis, myocardial infarction, coronary heart

XX disease, stroke, peripheral vascular diseases, venous thromboembolism and

XX pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also

XX useful in forensics, paternity testing, genetic analysis and phenotype

XX correlations to diseases. The present sequence is an example of one of

XX the human gene SNPs shown in the specification

SQ Sequence 21 BP; 6 A; 5 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 21;

Best Local Similarity 93.8%; Pred. No. 7e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 849 CCTGGACAAGGACCTG 864

|||||

Db 6 CCTGGACAAGTACCTG 21

RESULT 608

AAI73045

ID AAI73045 standard; DNA; 21 BP.

AC AAI73045;

XX 24-OCT-2002 (first entry)

DE Frosty forward primer.

XX Gene; frosty; 7 transmembrane family; GPCR64; fetal liver; placenta;

KW testes; uterus; vaccine; allergy; infection; Parkinson's disease;

KW human immunodeficiency virus; HIV-1; HIV-2; pain; cancer; diabetes;

KW obesity; anorexia; bulimia; asthma; migraine; vomiting; anxiety; PCR;

KW acute heart failure; hypotension; hypertension; urinary retention;

KW osteoporosis; angina pectoris; myocardial infarction; stroke; ulcer;

KW benign prostatic hypertrophy; Gilles de la Tourette's syndrome; priver;

KW schizophrenia; manic depression; delirium; dementia; mental retardation;

KW dyskinesia; Huntington's disease; ss.

XX Homo sapiens.

OS

XX US2002064830-A1.

PN

XX 30-MAY-2002.

PD

XX 22-JUN-2001; 2001US-00887377.

PF

XX 28-JUN-2000; 2000US-0214355P.

PR

XX (ALIS//) ALI S.

PA (HILL//) HILL J.

PA (VAWT//) VAWT L.

XX

PI Ali S, Hill J, Vawter L;

XX

DR WPI; 2002-573695/61.

XX

XX New frosty polypeptide, a member of 7 transmembrane family of

PT polypeptides and encoding polynucleotide, useful for diagnosing and

PT treating infections, cancer, diabetes, osteoporosis, psychotic and

PT neurological disorders.

XX

PS Example 8; Page 12; 17pp; English.

XX

XX The sequences given in AAI73045-47 are primers and a probe which were

CC used in TagMan analysis of frosty mRNA. Frosty is a member of the 7

CC transmembrane family of polypeptides and shows homology with GPCR64.

CC Frosty is expressed in fetal liver, placenta, testes and uterus. Frosty

CC and the corresponding cDNA are useful as vaccines. Frosty and frosty cDNA

CC are also useful in the diagnosis and treatment of human diseases

CC including allergies, infections such as bacterial, fungal, protozoan, and

CC viral infections, particularly infections caused by human

CC immunodeficiency virus (HIV)-1 or HIV-2, pain, cancers, diabetes,

CC obesity, anorexia, bulimia, asthma, Parkinson's disease, acute heart

CC failure, hypotension, hypertension, urinary retention, osteoporosis,

CC angina pectoris, myocardial infarction, stroke, ulcers, benign prostatic

CC hyper trophy, migraine, vomiting, psychotic and neurological disorders

CC including anxiety, schizophrenia, manic depression, delirium, dementia,

CC severe mental retardation and dyskinesias, such as Huntington's disease

CC or Gilles de la Tourette's syndrome. They are also useful for identifying

CC compounds that may be agonists or antagonists which are also useful in

CC therapy. Frosty is useful as an immunogen to produce antibodies

CC immunospecific for the polypeptide. The antibodies are useful to isolate

CC or to identify the clones expressing the polypeptide or to purify the

CC polypeptides by affinity chromatography. The antibodies may also be

CC employed to treat diseases. Frosty is also useful to identify membrane

CC bound or soluble receptor. Frosty cDNA is useful for creating transgenic

CC and knock-out animals, and for chromosome localization studies

XX

SQ Sequence 21 BP; 8 A; 4 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 21;

Best Local Similarity 93.8%; Pred. No. 7e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 956 ACCGCGACGAAGGTGCT 971

|||||

Db 5 ACCGCGACGAAGGTGCT 20

RESULT 609

ABK65706

ID ABK65706 standard; DNA; 21 BP.

XX

AC ABK65706;

XX

DT 02-JUL-2002 (first entry)

XX

DE Human single nucleotide polymorphism #326.

XX

XX Human; single nucleotide polymorphism; SNP; sickle cell anaemia;

KW agammaglobulinaemia; diabetes insipidus; Lesch-Nyhan syndrome;

KW muscular dystrophy; Wiskott-Aldrich syndrome; Fabry's disease;

KW familial hypercholesterolaemia; polycystic kidney disease; cancer;

KW hereditary spherocytosis; Von Willebrand's disease; tubercous sclerosis;

KW hereditary haemorrhagic telangiectasia; familial colonic polyposis;

KW Ehlers-Danlos syndrome; osteogenesis imperfecta; autoimmune disease;

KW acute intermittent porphyria; inflammation; nervous system disorder;

KW infection; rheumatoid arthritis; multiple sclerosis; diabetes;

KW systemic lupus erythematosus; Graves disease; longevity; obesity;

KW baldness; fertility; forensic; paternity testing; ss.

XX

XX Homo sapiens.

OS

XX US2002037508-A1.

PN

XX 28-MAR-2002.

PD

XX

PF 18-JAN-2001; 2001US-00765081.

XX

XX 19-JAN-2000; 2000US-0176861P.

PR

XX (CARG//) CARGILL M.

PA (IREL//) IRELAND J S.

PA (LAND//) LANDER E S.

XX

XX Cargill M, Ireland JS, Lander ES;

XX WPI; 2002-315108/35.

DR

XX PT Nucleic acid comprising single nucleotide polymorphisms, useful in
 PT forensics, paternity testing and diagnosis of disease.
 XX PS Claim 1; Page 77; 96pp; English.
 XX CC The invention relates to a nucleic acid comprising single nucleotide
 CC polymorphisms (SNPs) associated with diseases. The nucleic acids
 CC comprising the SNPs and probes and primers for detecting them may be used
 CC in assays for the diagnosis of diseases associated with SNPs (such as
 CC sickle cell anemia, agammaglobulinemia, diabetes insipidus, Lesch-Nyhan
 CC syndrome, muscular dystrophy, Wiskott-Aldrich syndrome, Fabry's disease,
 CC familial hypercholesterolemia, polycystic kidney disease, hereditary
 CC spherocytosis, Von Willebrand's disease, tuberous sclerosis, hereditary
 CC haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos
 CC syndrome, osteogenesis imperfecta, and acute intermittent porphyria,
 CC symptoms of, or susceptibility to, multifactorial diseases of which a
 CC component is or may be genetic, such as autoimmune diseases,
 CC inflammation, cancer, diseases of the nervous system, and infection by
 CC pathogenic microorganisms, autoimmune diseases including rheumatoid
 CC arthritis, multiple sclerosis, diabetes (insulin-dependent and non-
 CC independent), systemic lupus erythematosus and Graves disease, cancers
 CC including cancers of the bladder, brain, breast, colon, oesophagus,
 CC kidney, leukaemia, liver, lung, oral cavity, ovary, pancreas, prostate,
 CC skin, stomach and uterus, longevity, appearance (e.g., baldness,
 CC obesity), strength, speed, endurance, fertility, and susceptibility or
 CC receptivity to particular drugs or therapeutic treatments), in forensics
 CC and in paternity testing. ABK65381-ABK65941 represent human single
 CC nucleotide polymorphisms of the invention
 XX SQ Sequence 21 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 1 Other;
 Query Match 0.8%; Score 14.4; DB 1; Length 21;
 Best Local Similarity 83.3%; Pred. No. 7e+02;
 Matches 15; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 QY 886 GGGACATCATCAACATG 903
 ||||| |
 DB 2 GGGACAGCMTCCATG 19
 RESULT 610
 ABA94579
 ID ABA94579 standard; DNA; 21 BP.
 AC ABA94579;
 XX 09-APR-2002 (first entry)
 DE A. pullulans xyna locus DNA amplifying primer APXR.
 KW Xylanase; xyna; transcriptional regulation; xylan; xylose; enzyme;
 KW fungal; pharmaceutical; food; chemical; PCR primer; ss.
 XX Aureobasidium pullulans.
 OS WO2001196578-A2.
 XX WO2001196578-A2.
 XX 20-DEC-2001.
 XX 14-JUN-2001; 2001WO-US019340.
 XX 15-JUN-2000; 2000US-00595344.
 XX (UYGE-) UNIV GEORGIA RES FOUND INC.
 XX Li X, Ljungdahl LG;
 XX WPI, 2002-130735/17.
 XX New isolated nucleic acid encoding a signal peptide for efficient and
 PT economical secreted expression of a protein of interest in a eukaryotic
 PT cell, widely used in pharmaceutical, food and chemical industries.

XX Example 1; Page 28; 43pp; English.
 XX CC The invention relates to an isolated nucleic acid molecule comprising a
 CC xylanase (xyna) transcriptional regulatory sequence operably linked to a
 CC heterologous coding sequence. Provided is a method for producing a
 CC heterologous protein in Aureobasidium pullulans, by up-regulating the
 CC expression of a sequence encoding a heterologous protein by adding xylan
 CC or xylose to a medium in which a recombinant A. pullulans cell comprising
 CC the new isolated nucleic acid molecule is cultured, where the medium
 CC contains glucose at a concentration less than 0.02 % (weight/volume) and
 CC a xyna transcription regulatory sequence is operably linked to the
 CC sequence encoding the heterologous protein, and the heterologous protein
 CC is expressed. The nucleic acid containing a signal peptide-encoding
 CC sequence, is useful for efficient and economical secreted expression of a
 CC protein of interest in a eukaryotic cell, especially a fungal cell such
 CC as Aureobasidium pullulans. It may be used as a probe. The proteins
 CC produced are widely used in pharmaceutical, food, chemical and other
 CC industries. The present sequence represents a PCR primer for amplifying
 CC the nucleotide sequence of A. pullulans xyna locus
 XX SQ Sequence 21 BP; 4 A; 9 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.4; DB 1; Length 21;
 Best Local Similarity 93.8%; Pred. No. 7e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 308 CACTCAGCTCTGCACC 323
 ||||| |
 DB 2 CACTCAGCTCGCACC 17
 RESULT 611
 ABS98129/c
 ID ABS98129 standard; DNA; 21 BP.
 XX ABS98129;
 XX 23-DEC-2002 (first entry)
 DE Human multidrug resistance gene polymorphic sequence #31.
 KW Human; ds; cytochrome P450 A1; CYP4501A1; UGT2B4; MDR1;
 KW cytochrome P450 A2; CYP4501A2; cytochrome P450 02E; CYP45002E1; LTF;
 KW adrenergic receptor beta1; ADRB1; aryl hydrocarbon; AHR; MRP3; NR1I2;
 KW aryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS;
 KW cyclooxygenase 2; COX2; diazepam binding inhibitor; DBI; haematological;
 KW glutathione-S-transferase 12; GSTI2; histamine-N-methyl transferase;
 KW HNMT; kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NNMT;
 KW UDP-glucuronosyl transferase 2; UGT2; sulfotransferase; thermolabile; STM;
 KW UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7;
 KW UGT2B7; UDP-glucuronosyl transferase; UGT2B15; uridine receptor; uPA;
 KW multidrug resistance 1; lactoferrin; orphan nuclear receptor;
 KW multidrug resistance associated protein 3; cancer; prostate;
 KW acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5;
 KW altered drug metabolism; cardiovascular function; colorectal tumour;
 KW central nervous system; pulmonary; immunological; SNP;
 KW single nucleotide polymorphism.
 XX Homo sapiens.
 OS WO200257410-A2.
 XX WO200257410-A2.
 XX 25-JUL-2002.
 XX 28-NOV-2001; 2001WO-US044838.
 XX 28-NOV-2000; 2000US-00724389.
 XX (DNAS-) DNA SCI LAB INC.
 XX Guida M, Hall J;

XX DR WPI; 2002-698522/75.
XX PT Isolated nucleic acid molecules having polymorphisms in known human genes
XX PT e.g. cytochrome P450 and catepsin S useful as genetic linkage markers
XX PT for locating, identifying and characterizing the genes responsible for
XX PT disorder-related traits.
XX PS Example 22; Page 144; 714pp; English.
XX CC This invention relates to the sequence of an isolated nucleic acid
XX CC molecule comprising at least one base variation from that of a known
XX CC human cytochrome P450 A1 (CYP450A1), cytochrome P450 A2 (CYP450A2),
XX CC cytochrome P450 02B1 (CYP45002B1), adrenergic receptor beta1 (ADBR1),
XX CC aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator
XX CC (ARNT), catepsin S (CTSS), cyclooxygenase 2 (COX2), diazepam binding
XX CC inhibitor (DBI), epoxide hydroxylase 2 (EPHX2), 5-lipoxygenase activating
XX CC protein (FLAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl
XX CC transferase (HNMT), (Kallikrein 2) KLK2, nicotinamide-N-methyl
XX CC transferase (NNMT), NADPH quinone oxidoreductase 2 (NQO2),
XX CC sulfoltransferase thermolabile (STM), UDP-glucuronosyl transferase 2B4
XX CC (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl
XX CC transferase (UGT2B15), urokinase receptor (uPA), multidrug resistance 1
XX CC (MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3
XX CC (MRP3), orphan nuclear receptor (NR1I2), or acetylcholine muscarinic
XX CC receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence.
XX CC The polymorphisms in the human genes cited in the invention are useful as
XX CC genetic linkage markers for locating and characterizing the genes that
XX CC are responsible for specific traits within the genome and eventually
XX CC identifying the genes responsible for a variety of disorder-related
XX CC traits as a result of their e.g., overexpression, constitutive
XX CC expression, mutation or underexpression, which may be used in diagnosing
XX CC and/or treating the disorders. The nucleic acid molecules comprising the
XX CC polymorphic sequences contained in CYP450A1, CYP450A2, CYP4502E1,
XX CC ARNT, EPHX2, GST12, NNMT, NQO2, NR1I2, STM, UGT2B4, UGT2B7, UGT2B15, AHR,
XX CC MDR1 and/or MDR3 are useful for screening individuals for altered drug
XX CC metabolism. The polymorphic sequences contained in CYP450A1, CYP450A2,
XX CC AHR, MDR1 and/or MDR3 may also be used to screen individuals for
XX CC susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are
XX CC used to screen for altered cardiovascular function, in COX2 for altered
XX CC susceptibility to colorectal tumors, in DBI or CHMR1 for altered central
XX CC nervous system function, in FLAP and HNMT for altered pulmonary
XX CC immunological or haematological function, in KLK2 for altered serine
XX CC protease activity in the prostate, in LTF for altered immunological or
XX CC haematological function, in CHMR3, CHMR4 or CHMR5 for altered central and
XX CC peripheral nervous system function. The present sequence represents a
XX CC polymorphic DNA sequence of the invention
SQ Sequence 21 BP; 7 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 21;
Best Local Similarity 93.8%; Pred. No. 7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 52 CGAGTGTGACTGCTGA 67
Db 18 GCAATGTGACTGCTGA 3
RESULT 612
ACA58076/c
ID ACA58076 standard; DNA; 21 BP.
XX AC ACA58076;
XX DT 09-JUN-2003 (first entry)
XX DE Human familial bipolar affective disorder chromosome marker primer #24.
XX KW Human; genotype determination; familial bipolar affective disorder;
XX KW chromosomal region linked; locus associated with resistance; D4S402;
XX KW D4S424; D4S431; D4S404; D11S394; D11S29; chromosome marker; primer; ss.
OS Homo sapiens.
XX PN US2002192655-A1.
XX PD 19-DEC-2002.
XX PF 13-JUN-2001; 2001US-00881012.
XX PR 29-MAR-1996; 96US-0014334P.
XX PR 20-OCT-1997; 97US-0062924P.
XX PR 19-OCT-1998; 98US-00175158.
XX PA (GINN/) GINNS E I.
XX PA (EGEL/) EGELAND J A.
XX PA (PAUL/) PAUL S M.
XX PI Ginn EI, Egeland JA, Paul SM;
XX DR WPI; 2003-352708/33.
XX PT Determining a genotype associated with increased or decreased resistance
XX PT to familial bipolar affective disorder in a family comprises determining
XX PT the genotype of e.g., chromosomal regions D4S402 and D4S424.
XX PS Disclosure; Page 9; 79pp; English.
XX CC The present invention relates to a method of determining a genotype
XX CC associated with increased or decreased resistance to familial bipolar
XX CC affective disorder. The method comprises determining the genotype with at
XX CC least one marker of at least one chromosomal region linked to a locus
XX CC associated with resistance to bipolar affective disorder, where the
XX CC chromosomal regions are included of and localised between D4S402 and
XX CC D4S424, D4S431 and D4S404, or D11S394 and D11S29. The invention also
XX CC discloses a kit for determining a genotype associated with increased or
XX CC decreased resistance to familial bipolar affective disorder, where the
XX CC kit comprises markers for two or more of the chromosomal regions cited.
XX CC The method and kit are useful for determining a genotype associated with
XX CC increased or decreased resistance to familial bipolar affective disorder
XX CC in a family affected by bipolar affective disorder, for determining the
XX CC contribution of these chromosomal regions to bipolar affective disorder
XX CC in an affective family member, and for assessing an increased or
XX CC decreased risk of developing bipolar illness for a tested individual from
XX CC an affected family. ACA58053-ACA58292 represent primers used in the
XX CC present invention
XX SQ Sequence 21 BP; 5 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 21;
Best Local Similarity 93.8%; Pred. No. 7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 315 CTGTGCACCCAGAGATT 330
Db 18 CTATGCACCCAGAGATT 3
RESULT 613
ACC58762
ID ACC58762 standard; DNA; 21 BP.
XX AC ACC58762;
XX DT 26-AUG-2003 (first entry)
XX DE Pro-alpha(III) chain 5' PCR primer.
XX KW Collagen; procollagen; pro-alpha chain; vulneryary; gene therapy;
XX KW drug delivery; PCR; primer; ss.
XX OS Unidentified.
XX PN WO2003035692-A2.
XX


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PD 01-MAY-2003.
XX
XX 23-OCT-2002; 2002WO-GB004785.
PF
XX 23-OCT-2001; 2001GB-00025369.
PR
XX 23-OCT-2001; 2001GB-00025372.
XX
XX (UYMA-) UNIV VICTORIA MANCHESTER.
XX
XX Kadtler KE, Bulleid NJ;
XX
XX WPI; 2003-504991/47.
DR
XX
XX Novel modified pro-alpha-chain useful for treating wounds and fibrotic
PT disorders, has triple helical forming domain linked to N-terminal domain
PT that contains a polypeptide sequence from proteoglycan protein core.
XX
XX Example 1; Page 33; 73pp; English.
XX
XX The present sequence is that of a 5' primer, which was used with the 3'
CC primer given in ACC58763 for the PCR amplification of the pro-alpha1(III)
CC chain. The PCR product was used to prepare a DNA molecule (see ACC58766)
CC encoding a modified pro-alpha chain (see ABR42661) in which decorin
CC replaced the globular domain of the N-propeptide of the pro-alpha1(III)
CC chain. This is an example of modified pro-alpha chains of the invention
CC that may form part of a procollagen molecule for incorporation into
CC collagen polymers, matrices and gels used to treat wounds and fibrotic
CC disorders, in tissue replacement, and in cosmetic treatments
XX
XX Sequence 21 BP; 7 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.4; DB 1; Length 21;
Best Local Similarity 93.8%; Pred. No. 7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 764 TGCTCAAGGACCTCAA 779
Db 3 TGGTCAAGGACCTCAA 18
RESULT 614
AAT97858
ID AAT97858 standard; DNA; 22 BP.
AC
XX AAT97858;
XX
DT 09-MAR-1998 (first entry)
XX
XX PCR primer 7 for DNA encoding chimeric Ewing's sarcoma-WT1 protein.
XX
XX Ewing's sarcoma; EWS; EWS-WT1 protein; peripheral neuroectodermal tumour;
XX PNET; breakpoint locus; Wilms' tumour;
XX desmoplastic small round cell tumour; DSCR tumour; PCR primer; ss.
XX
XX Synthetic.
OS
XX Homo sapiens.
XX
XX US5670317-A.
XX
XX 23-SEP-1997.
XX
XX 08-MAY-1995; 95US-00437027.
XX
XX 08-MAY-1995; 95US-00437027.
XX
XX (SLOK) SLOAN KETTERING INST CANCER RES.
XX
XX Ladanyi M, Gerald W;
XX
XX WPI; 1997-479448/44.
XX
XX Diagnosis of desmoplastic small round cell tumours - by detecting nucleic
PT acid encoding chimeric EWS-WT1 protein.
XX
XX Disclosure; Col 29; 34pp; English.
XX
XX Oligonucleotides AAT97852-68 are used both as PCR primers (in reverse
CC transcriptase PCR), and probes for the detection of DNA encoding a
CC chimeric Ewing's sarcoma (EWS)-WT1 protein. EWS is also known as
CC peripheral neuroectodermal tumour (PNET). WT1 was screened as a
CC breakpoint locus because of its involvement in Wilms' tumour, which
CC shares some histopathologic features of desmoplastic small round cell
CC (DSRC) tumours. The EWS-WT1 chimeric transcript has been detected in 11
CC out of 12 DSRC tumours studied and in none of 49 other tumours. DSRC
CC tumours are associated with translocation of the EWS gene. The present
CC oligonucleotide is complementary to the WT1 intron 5' to exon 7, and is
CC used in a method for the diagnosis of DSRC tumours in patients. The
CC method comprises detecting a nucleic acid molecule encoding a chimeric
CC EWS-WT1 protein in a sample from the subject, where positive detection
XX indicates the presence of a DSRC tumour
XX
XX Sequence 22 BP; 1 A; 10 C; 2 G; 9 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.4; DB 1; Length 22;
Best Local Similarity 93.8%; Pred. No. 7.3e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 1697 CTTACTCTCTGCTAC 1712
Db 7 CTTACTCTCTGCTGC 22
RESULT 615
AAX09130/c
ID AAX09130 standard; DNA; 22 BP.
XX
XX AAX09130;
XX
XX 24-MAR-1999 (first entry)
XX
XX Human biallelic polymorphic marker upstream primer #10.
XX
XX Polymorphism; biallelic; human; forensic; paternity testing; disease;
XX detection; phenotypic typing; characteristic; infection; hereditary;
XX autoimmune disease; cancer; inflammation; drug; therapy; medicament;
XX treatment; marker; primer; ss.
XX
XX Synthetic.
OS
XX Homo sapiens.
XX
XX WO9820165-A2.
XX
XX 14-MAY-1998.
XX
XX 05-NOV-1997; 97WO-US020313.
XX
XX 06-NOV-1996; 96US-0030455P.
XX
XX (WHEED) WHITEHEAD INST BIOMEDICAL RES.
XX
XX Lander ES, Wang D, Hudson T;
XX
XX WPI; 1998-286974/25.
XX
XX New isolated nucleic acid segments from the human genome - used for
XX determining polymorphic forms for use in e.g. forensics, paternity
XX testing or phenotypic typing for disease.
XX
XX Claim 15; Page 47; 310pp; English.
XX
XX AAX09121-X10268 are allele-specific oligonucleotide primers used in the
CC isolation of various biallelic polymorphic markers found in the human
CC genome (represented in AAX10269-X12937). These primers can be used in a
CC method for determining polymorphic forms in an individual for use in e.g.
CC forensics, paternity testing or for phenotypic typing for diseases such
CC as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
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CC dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial
 CC hypercholesterolemia, polycystic kidney disease, hereditary
 CC spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary
 CC haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos
 CC syndrome, osteogenesis imperfecta, acute intermittent porphyria,
 CC autoimmune diseases, inflammation, cancer, diseases of the nervous
 CC system, infection by pathogenic microorganisms, and characteristics such
 CC as longevity, appearance (e.g. baldness, obesity), strength, speed,
 CC endurance, fertility, and susceptibility or receptivity to particular
 CC drugs or therapeutic treatments. The isolated polymorphic nucleic acid
 CC segments can also be used to produce medicaments for the treatment or
 CC prophylaxis of such diseases
 XX
 SQ Sequence 22 BP; 9 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.4; DB 1; Length 22;
 Best Local Similarity 93.8%; Pred. No. 7.3e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1457 TCTTCTCTCAGTCTGGG 1472
 16 TCTTCTCTCAGTCTGTG 1
 Db
 RESULT 616
 AAV32818
 ID AAV32818 standard; DNA; 22 BP.
 AC AAV32818;
 XX
 DT 26-OCT-1998 (first entry)
 XX
 DE Reverse primer for Staphylococcus aureus pcp34 gene.
 XX
 KW collagen adhesin gene; cna; primer; PCR; amplification; cnaB;
 KW cna-up gene; fibronectin binding protein A gene; fnbA; fnbB; beta-toxin;
 KW pcp gene; pcp12 gene; pcp34 gene; hlb; biotyping;
 KW southern blot hybridisation; insertion sequence typing;
 KW plasmid profile analysis; ss.
 XX
 OS Synthetic.
 OS Staphylococcus aureus.
 XX
 PN US5789171-A.
 XX
 XX 04-AUG-1998.
 PD
 XX 20-JUN-1996; 96US-00667079.
 PF
 XX 20-JUN-1996; 96US-00667079.
 PR
 XX (UVAR-) UNIV ARKANSAS.
 PA
 XX Smeltzer MS;
 PI
 XX
 DR WPI; 1998-446070/38.
 XX
 PT Differentiating clinical Staphylococcus aureus strains - uses Southern
 PT blot probes for specific genes that determine genomic organisation.
 XX
 PS Example 8; Fig 7; 25pp; English.
 XX
 CC Reverse and forward (AAV32817) primers were used to amplify the
 CC Staphylococcus aureus pcp34 gene. The PCR product was used as a probe in
 CC the method of the invention. The invention provides a method of
 CC differentiating clinical isolates of S. aureus in isolated genomic DNA
 CC samples. The method involves digesting the samples with a restriction
 CC enzyme followed by southern blot hybridisation, using DNA probes selected
 CC from at least two S. aureus genes, to produce a hybridisation profile
 CC which is capable of differentiating S. aureus clinical isolates. The S.
 CC aureus genes used as genotypic markers were the collagen adhesin (cna)
 CC gene, cnaB gene, cna-up gene, fibronectin binding protein A (fnbA) gene,
 CC fnbS gene, beta-toxin (hlb) gene, pcp gene, pcp12 gene and the pcp34

CC gene. This polymorphic based genetic identification method has proved
 CC more specific in identifying epidemiologically related strains than,
 CC previous techniques, including polymerase chain reaction, biotyping,
 CC insertion sequence typing and plasmid profile analysis
 XX
 SQ Sequence 22 BP; 8 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.4; DB 1; Length 22;
 Best Local Similarity 93.8%; Pred. No. 7.3e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1306 TTCAAGACATCAACT 1321
 5 TCCAAGACATCAACT 20
 Db
 RESULT 617
 AAH49379
 ID AAH49379 standard; DNA; 22 BP.
 AC AAH49379;
 XX
 DT 30-NOV-2001 (first entry)
 XX
 DE Human papilloma virus E6 PCR primer 33ME51.
 XX
 KW PCR primer; E6; dedifferentiation; micro-metastasis; cancer cell;
 KW cytodiagnostic; cervical carcinoma; ss.
 XX
 OS Human papillomavirus.
 XX
 PN DE10109259-A1.
 XX
 PD 13-SEP-2001.
 XX
 PF 26-FEB-2001; 2001DE-01009259.
 XX
 PR 25-FEB-2000; 2000DE-01009081.
 XX
 XX (GIES/) GIESING M.
 PA
 XX
 DR WPI; 2001-607957/70.
 XX
 PT Characterizing increased dedifferentiation of cancer cells useful for
 PT diagnosing cancer, particularly early cervical cancer, comprises applying
 PT body fluids to a foil covered slide and detecting dye-marked cells by
 PT laser.
 XX
 PS Example 2; Page 14; 18pp; German.
 XX
 CC This invention describes a novel method for characterizing increased
 CC dedifferentiation and micro-metastasis of cancer cells, comprising
 CC applying body fluid cells to a carrier and cytodiagnostically examining
 CC its cells using micro-dissection to separate cytodiagnostically
 CC distinguishable cells from normal cells and performing at least one gene
 CC analysis on the separated cells. The method is used to diagnose cancer,
 CC particularly for the early recognition of cervical carcinoma. This
 CC sequence represents a PCR primer used in the amplification of the human
 CC Papilloma virus E6 gene used to illustrate the method of the invention
 XX
 SQ Sequence 22 BP; 5 A; 11 C; 5 G; 1 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.4; DB 1; Length 22;
 Best Local Similarity 93.8%; Pred. No. 7.3e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 771 GGACCTCAACACGCC 786
 3 GGACCTCAACACGCC 18
 Db
 RESULT 618
 ACC82981

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ID ACC92981 standard; DNA; 22 BP.
XX AC ACC92981;
XX DT 27-OCT-2003 (revised)
XX DT 27-AUG-2003 (first entry)
XX DT
XX DE Outer reverse PCR primer used to sequence HIV-1 tat gene.
XX DE Regulatory gene; accessory gene; HIV; human immunodeficiency virus;
XX KW vaccine; infection; gene therapy; tat; PCR; primer; ss.
XX KW
XX OS Human immunodeficiency virus 1.
XX PN WO2003037919-A2.
XX PD 08-MAY-2003.
XX PF 31-OCT-2002; 2002WO-IB004550.
XX PR 31-OCT-2001; 2001ZA-00008978.
XX PA (SAMP-) SOUTH AFRICAN MEDICAL RES COUNCIL.
XX PA (UYCA-) UNIV CAPE TOWN.
XX PI Williamson C, Van Harmelen JH, Gray CM, Bourn W, Karim SA;
XX DR WPI; 2003-430497/40.
XX PT New molecules comprising HIV-1 subtype isolate regulatory/accessory
XX PT genes, useful for manufacturing a vaccine for treating or preventing HIV
XX PT infection.
XX PS Disclosure; Page 20; 97pp; English.
XX CC The invention relates to molecules comprising HIV-1 subtype isolate
XX CC regulatory/accessory genes (tat, nef and rev genes) and modifications and
XX CC derivatives thereof. The invention also provides proteins encoded by such
XX CC genes. Sequences of the invention are useful for manufacturing vaccines
XX CC for treating or preventing human immunodeficiency virus (HIV) infections.
XX CC They are also useful in gene therapy. The present sequence is a PCR
XX CC primer used to sequence HIV-1 tat gene. Note: This sequence is stated to
XX CC be the same as that shown as SEQ ID NO: 23 in sequence listing. However
XX CC this sequence has an additional base at its 3' end. (Updated on 27-OCT-
XX CC 2003 to standardise OS field)
XX SQ Sequence 22 BP; 5 A; 11 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 22;
Best Local Similarity 93.8%; Pred. No. 7.3e-02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 528 CCTCAATAGCCCATC 543
Db 1 CCTCAATATCCCATC 16
|||||
|||||

RESULT 619
ADB80421
ID ADB80421 standard; DNA; 22 BP.
XX AC ADB80421;
XX DT 04-DEC-2003 (first entry)
XX DE Rat CLCA1 gene PCR primer #8.
XX KW ss; primer; antiinflammatory; antiasthmatic; antiallergic; CLCA1;
XX KW calcium activated chloride channel protein; chest disorder;
XX KW airway disorder; chronic obstructive lung disease; chronic bronchitis;
XX KW bronchial asthma; rhinitis; hay fever; pneumonia.
XX OS Rattus sp.

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XX PN WO2003037927-A1.
XX PD 08-MAY-2003.
XX PF 01-NOV-2002; 2002WO-JP011417.
XX PR 02-NOV-2001; 2001JP-00337864.
XX PR 13-DEC-2001; 2001JP-00380099.
XX PR 18-JAN-2002; 2002JP-00010035.
XX PA (TAKE ) TAKEDA CHEM IND LTD.
XX PN Nakanishi A, Morita S;
XX WPI; 2003-430500/40.
XX DR
XX PT Rat CLCA1 gene and protein encoded by it useful for screening inhibitors
XX PT of its activity and expression and as chronic obstructive lung disease
XX PT and bronchial asthma remedies.
XX PS Example 2; Page 97; 115pp; Japanese.
XX CC The invention relates to proteins and their salts and partial peptides
XX CC which are the expression product of the rat CLCA1 gene or are related
XX CC proteins with similar activity. CLCA1 is a calcium activated chloride
XX CC channel protein. The proteins are useful for the treatment, prevention
XX CC and diagnosis of chest and airway disorders including chronic obstructive
XX CC lung disease, chronic bronchitis, bronchial asthma, chronic rhinitis,
XX CC acute rhinitis, allergic rhinitis, hay fever and pneumonia. This sequence
XX CC corresponds to a PCR primer used to isolate and clone the rat CLCA1 gene
XX CC (ADB80434).
XX SQ Sequence 22 BP; 6 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 22;
Best Local Similarity 93.8%; Pred. No. 7.3e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 672 AAGCAAGCTCACAGAC 687
Db 3 AAGCGAGCTCACAGAC 18
|||||
|||||

RESULT 620
AAT11978/c
ID AAT11978 standard; DNA; 19 BP.
XX AC AAT11978;
XX DT 25-MAR-2003 (revised)
XX DT 13-MAR-1996 (first entry)
XX DE CMV antisense oligonucleotide (ISIS 5481).
XX KW antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis;
XX KW intermediate early complex; IE1; IE2; DNA polymerase gene; ss.
XX OS Synthetic.
XX PH Key Location/Qualifiers
XX FT modified_base 1..19
XX FT /tag= a
XX FT /note= "phosphorothioate backbone"
XX PN US5442049-A.
XX PD 15-AUG-1995.
XX PF 25-JAN-1993; 93US-00009263.
XX PR 19-NOV-1992; 92US-00927506.
XX SQ

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PA (ISIS-) ISIS PHARM INC.
XX Baker B, Draper K, Anderson K;
XX WPI; 1995-292538/38.
XX
XX New oligo-nucleotide inhibits cytomegalovirus replication - by binding to
XX a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and
XX treatment of CMV diseases.
XX
XX Example 10; Col 17; 66pp; English.
XX
XX AAT11971-84 are antisense oligonucleotides (ONs) against human
XX cytomegalovirus (CMV) that displayed activities of at least 50 % of
XX control (ISIS 2922 shown in AAT11961). It was found that up to 4 internal
XX mismatches could be tolerated without loss of antiviral activity. ISIS
XX 4376 is a 19-mer antisense ON related to ISIS 2292, but with one
XX nucleotide removed from each end. Antisense ONs targeting CMV DNA or RNA
XX coding for the IE1, IE2 or DNA polymerase proteins have been shown to be
XX effective in therapy, prophylaxis and diagnosis of CMV infection. The ONs
XX may be modified to reduce nuclease resistance and to increase their
XX efficacy. Modifications include phosphorothioate backbones, alkyl and
XX halogen-substituted sugar moieties at the 2' position. (Updated on 25-MAR
XX -2003 to correct PF field.)
XX
XX Sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 130 CGGATGAGAGAGATCAAAAC 148
XX 19 CGCAAGAGAGAGAGCAAAAC 1
XX
XX Db
XX
XX RESULT 621
XX AAT11971/c
XX ID AAT11971 standard; DNA; 19 BP.
XX
XX AC AAT11971;
XX
XX DT 25-MAR-2003 (revised)
XX DT 13-MAR-1996 (first entry)
XX
XX CMV antisense oligonucleotide (ISIS 4376).
XX
XX antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis;
XX intermediate early complex; IE1; IE2; DNA polymerase gene; ss.
XX
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX modified_base 1..19
XX FT /tag= a
XX FT /note= "phosphorothioate backbone"
XX
XX US5442049-A.
XX
XX 15-AUG-1995.
XX
XX 25-JAN-1993; 93US-00009263.
XX
XX 19-NOV-1992; 92US-00927506.
XX
XX (ISIS-) ISIS PHARM INC.
XX Baker B, Draper K, Anderson K;
XX WPI; 1995-292538/38.
XX
XX New oligo-nucleotide inhibits cytomegalovirus replication - by binding to
XX a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and
XX treatment of CMV diseases.
XX
XX Example 10; Col 17; 66pp; English.
XX
XX AAT11971-84 are antisense oligonucleotides (ONs) against human
XX cytomegalovirus (CMV) that displayed activities of at least 50 % of
XX control (ISIS 2922 shown in AAT11961). It was found that up to 4 internal
XX mismatches could be tolerated without loss of antiviral activity.
XX Antisense ONs targeting CMV DNA or RNA coding for the IE1, IE2 or DNA
XX polymerase proteins have been shown to be effective in therapy,
XX prophylaxis and diagnosis of CMV infection. The ONs may be modified to
XX reduce nuclease resistance and to increase their efficacy. Modifications
XX include phosphorothioate backbones, alkyl and halogen-substituted sugar
XX moieties at the 2' position. (Updated on 25-MAR-2003 to correct PF
XX field.)
XX
XX Sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 130 CGGATGAGAGAGATCAAAAC 148
XX 19 CGCAAGAGAGAGAGCAAAAC 1
XX
XX Db
XX
XX RESULT 622
XX AAT01679/c
XX ID AAT01679 standard; DNA; 19 BP.
XX
XX AC AAT01679;
XX
XX DT 17-DEC-1995 (first entry)
XX
XX Peptide nucleic acid targetting CMV IE2 nuc sig 2.
XX
XX peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;
XX antiviral; diagnostic; ss.
XX
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX misc_feature 1..19
XX FT /tag= a
XX FT /note= "at least one (and preferably all) of the backbone
XX subunits are composed of amide units, so that the
XX oligomer consists of the nucleobases attached covalently
XX to a polyamide backbone"
XX
XX WO9504748-A1.
XX
XX 16-FEB-1995.
XX
XX 09-AUG-1994; 94WO-US0009039.
XX
XX 09-AUG-1993; 93US-00104438.
XX
XX (ISIS-) ISIS PHARM INC.
XX Anderson KP, Crooke ST, Mirabelli CK, Ecker DJ, Cowsett LM;
XX WPI; 1995-090841/12.
XX
XX New peptide nucleic acid oligomers hybridisable to cytomegalovirus or
XX papillomavirus - are stable anti-sense molecules with high affinity for
XX single stranded DNA, used for treating infections.
XX
XX Claim 2; Page 44; 65pp; English.
XX
XX New oligomers are claimed which (A) have at least one peptide nucleic
XX acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, 5'
XX untranslated region, intron/exon (I/E) junction or coding sequence of
XX

```

CC cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or
 CC hybridisable to the E, E2, E4, E5, E6, E7, L1 or L2 reading frames of a
 CC papillomavirus. The PNAs can be used to target RNA and single stranded
 CC DNA (ssDNA) to produce antisense-type gene regulation moieties. Hence
 CC they may be used therapeutically for modulating cytomegalovirus and
 CC papillomavirus processes and also as diagnostics (e.g., as probes for
 CC specific mRNAs). PNA oligomers have high affinity for complementary
 CC single stranded DNA. They are also able to form triple helices in which a
 CC first PNA strand binds with RNA or ssDNA and a second PNA strand binds
 CC with the resulting double helix or with the first PNA strand. The PNAs
 CC possess no significant charge and are water soluble, which facilitates
 CC cellular uptake. Further, since they contain amides of non-biological
 CC amino acids, they are biostable and resistant to enzymatic degradation by
 CC proteases. The present sequence targets CMV IE2 nuclear localisation
 CC signal 2
 CC
 XX
 SQ Sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;
 Best Local Similarity 84.2%; Pred. No. 6.9e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAAC 148
 |||||
 Db 19 CGCAGAGAAGAGCAAC 1

RESULT 623
 AAT01649/c
 ID AAT01649 standard; DNA; 19 BP.
 XX
 AC AAT01649;
 XX
 DT 17-DEC-1995 (first entry)
 XX
 DE Peptide nucleic acid targeting CMV IE2 nuc sig 2.
 XX
 KW peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;
 KW antiviral; diagnostic; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT misc_feature 1..19
 FT /tag= a
 FT /note= "at least one (and preferably all) of the backbone
 FT subunits are composed of amide units, so that the
 FT oligomer consists of the nucleobases attached covalently
 FT to a polyamide backbone"
 XX
 XX WO9504748-A1.
 XX
 XX 16-FEB-1995.
 XX
 XX 09-AUG-1994; 94WO-US009039.
 XX
 XX 09-AUG-1993; 93US-00104438.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Anderson KP, Crooke ST, Mirabelli CK, Ecker DJ, Cowsert LM;
 XX
 XX WPT; 1995-090841/12.
 XX
 XX New peptide nucleic acid oligomers hybridisable to cytomegalovirus or
 XX papillomavirus - are stable anti-sense molecules with high affinity for
 XX single stranded DNA, used for treating infections.
 XX
 PS Claim 2; Page 43; 65pp; English.

CC New oligomers are claimed which (A) have at least one peptide nucleic
 CC acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, 5'
 CC untranslated region, intron/exon (I/E) junction or coding sequence of

CC cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or
 CC hybridisable to the E, E2, E4, E5, E6, E7, L1 or L2 reading frames of a
 CC papillomavirus. The PNAs can be used to target RNA and single stranded
 CC DNA (ssDNA) to produce antisense-type gene regulation moieties. Hence
 CC they may be used therapeutically for modulating cytomegalovirus and
 CC papillomavirus processes and also as diagnostics (e.g., as probes for
 CC specific mRNAs). PNA oligomers have high affinity for complementary
 CC single stranded DNA. They are also able to form triple helices in which a
 CC first PNA strand binds with RNA or ssDNA and a second PNA strand binds
 CC with the resulting double helix or with the first PNA strand. The PNAs
 CC possess no significant charge and are water soluble, which facilitates
 CC cellular uptake. Further, since they contain amides of non-biological
 CC amino acids, they are biostable and resistant to enzymatic degradation by
 CC proteases. The present sequence targets CMV IE2 nuclear localisation
 CC signal 2
 CC
 XX
 SQ Sequence 19 BP; 0 A; 6 C; 3 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;
 Best Local Similarity 84.2%; Pred. No. 6.9e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 131 GGATGAAGAAGATCAACG 149
 |||||
 Db 19 GCACAGAAGAGCAACG 1

RESULT 624
 AAQ95226
 ID AAQ95226 standard; DNA; 19 BP.
 XX
 AC AAQ95226;
 XX
 DT 09-FEB-1996 (first entry)
 XX
 DE Simple tandem repeat (STR) PCR primer wgla3a*.
 XX
 KW Simple tandem repeat; STR; treatment; genetic; diagnosis;
 KW characterisation; mapping; linkage studies; analysis; alleles;
 KW PCR primer wgla3a*; ss.
 XX
 OS Synthetic.
 XX
 FN WO9517522-A2.
 XX
 XX 29-JUN-1995.
 XX
 XX 21-DEC-1994; 94WO-GB002789.
 XX
 XX 21-DEC-1993; 93GB-00026052.
 XX
 XX (UYLE-) UNIV LEICESTER.
 XX
 XX Jeffreys AJ, Armour J;
 XX
 XX WPT; 1995-240682/31.
 XX
 XX Identifying simple tandem repeat loci in DNA - by screening DNA library
 XX to enrich for fragments contg. the repeats before cloning and
 XX rescreening, also simple tandem repeats for treatment or diagnosis.
 XX
 PS Claim 25; Page 36; 51pp; English.

CC AAQ95226 and AAQ95227 are a primer pair for the PCR amplification of the
 CC simple tandem repeat (STR) corresponding to wgla3. The STR can be used
 CC for treatment and diagnosis in human and veterinary medicine, partic. for
 CC genetic characterisation, mapping, linkage studies and analysis/diagnosis
 CC of acquired disease alleles
 CC
 XX
 SQ Sequence 19 BP; 3 A; 9 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;
 Best Local Similarity 84.2%; Pred. No. 6.9e+02;

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Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1446 GAACATCCATCTTCCTC 1464
   |||||
Db 1 GATCCATCCATCTTCCTC 19

RESULT 625
AAT10879
ID AAT10879 standard; DNA; 19 BP.
XX
XX AAT10879;
XX
XX 06-SEP-1996 (first entry)
XX
DE Human cytochrome P4501A2 (CYP1A2) gene PCR amplification primer.
XX
XX Cytochrome P450; detection; diagnosis; polymorphism; substitution;
XX metabolism; respiration; polymerase chain reaction; ss.
XX
XX Synthetic.
XX
XX WO9601328-A1.
XX
XX 18-JAN-1996.
XX
XX 06-JUL-1995; 95WO-JP001352.
XX
XX 06-JUL-1994; 94JP-00154571.
XX
XX (SAKA ) OTSUKA PHARM CO LTD.
XX (KIMS/) KIM S.
XX (SHIN/) SHIN K.
XX (SHIN/) SHIN J.
XX
XX Fukui T, Katsuragi K, Kinoshita M;
XX WPI; 1996-087678/09.
XX
XX Detection of human cytochrome p4501A2 gene polymorphism - useful in gene
XX diagnosis of metabolic activity polymorphism.
XX
XX Example 1; Page 8; 23pp; Japanese.
XX
XX AAT10877-T10898 are PCR primers used for the amplification of the human
XX cytochrome P4501A2 gene. They are used in a method for detecting
XX cytochrome P4501A2 gene polymorphism, in part. for detecting a T to G
XX base substitution at position 2064 or a C to A substitution at position
XX 2640. The method is easy, convenient and has a high degree of sensitivity
XX and accuracy. Polymorphisms in the P4501A2 gene can lead to a
XX modification of metabolism which may be beneficial or deleterious
XX
XX Sequence 19 BP; 4 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 270 ACGTCTGCTCTCTGGGAA 288
   |||||
Db 1 ATGTGCTGACCCCTGGGAA 19

RESULT 626
AAV41067/c
ID AAV41067 standard; DNA; 19 BP.
XX
XX AAV41067;
XX
XX
XX 25-SEP-1998 (first entry)
XX
XX Primer TEL:114U19 for abnormality detection.
XX
XX

```

KW	PCR primer; chromosomal abnormality; abnormality detection; leukaemia;	
KW	lymphoma; carcinoma; adenocarcinoma; sarcoma; glioma; neuroblastoma;	
KW	medullablastoma; malignant melanoma; malignant neoplastic condition; ss.	
XX		
CS	Synthetic.	
OS	Homo sapiens.	
XX		
PN	WO9824928-A2.	
XX		
PD	11-JUN-1998.	
XX		
XX	08-DEC-1997; 97WO-DK000556.	
PF		
XX		
PR	06-DEC-1996; 96DK-00001401.	
XX		
PA	(PALL/) PALLISGAARD N.	
XX		
PI	Pallisgaard N, Hokland P;	
XX		
DR	WPI; 1998-333344/29.	
XX		
PT	Detection of chromosomal abnormalities - by subjecting patient sample	
PT	nucleic acids to a multiplex molecular amplification procedure using	
PT	primers specific for characteristic nucleic acid sequence.	
XX		
XX	Claim 73; Page 107; 126pp; English.	
XX		
CC	This sequence represents a primer used in the method of the invention for	
CC	the detection of the presence or absence of chromosomal abnormalities,	
CC	each abnormality being associated with a condition in a subject and each	
CC	being defined by at least one characteristic nucleic acid sequence. The	
CC	method comprises: (a) obtaining a sample of nucleic acids derived from a	
CC	subject which may harbour one of the chromosomal abnormalities; (b)	
CC	subjecting the sample to a multiplex molecular amplification (MMA)	
CC	procedure, where a number of the characteristic sequences, if present in	
CC	a sufficient amount, will be amplified; (c) retrieving the product(s)	
CC	from step (b), and detecting the presence and/or absence of an amplicon	
CC	characteristic of the abnormal sequences to detect the presence or	
CC	absence of corresponding chromosomal abnormalities; where the MMA	
CC	procedure comprises the use of at least 7 mutually distinct primers (MDP)	
CC	in a single reaction mixture, each of the primers defining an end of at	
CC	least one characteristic nucleic acid sequence, and where at least one of	
CC	the primers defines the first end of at least two characteristic nucleic	
CC	acid sequences, the characteristic nucleic acid sequences each being of	
CC	determined in their opposite ends by MDP selected from the remainder of	
CC	the MDP. The methods can be used for detecting chromosomal abnormalities	
CC	associated with diseases including numerous leukaemia's, lymphoma's,	
CC	carcinoma's, adenocarcinoma's, sarcoma's, glioma's, neuroblastoma's,	
CC	medullablastoma, malignant melanoma, and malignant neoplastic conditions	
XX		
SQ	Sequence 19 BP; 4 A; 7 C; 3 G; 5 T; 0 U; 0 Other;	
	Query Match 0.8%; Score 14.2; DB 1; Length 19;	
	Best Local Similarity 84.2%; Pred. No. 6.9e+02;	
	Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;	
QY	716 TCGACATGAGAGGGGSC 734	
DB	19 TCGACATGAGTGGCGTC 1	
RESULT 627		
AAV26433	ID AAV26433 standard; DNA; 19 BP.	
XX		
XX	AAV26433;	
XX		
DT	30-JUL-1998 (first entry)	
XX		
DE	lacZ-specific primer 1.	
XX		
KW	lacZ; adeno-associated virus vector; therapeutic; liver; hepatic disease;	
KW	ss; PCR; primer; amplification.	

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XX OS Synthetic.
XX PN WO9809524-A1.
XX PD 12-MAR-1998.
XX PF 02-SEP-1997; 97WO-US015453.
XX PR 06-SEP-1996; 96US-0025616P.
XX PR 11-SEP-1996; 96US-0025649P.
XX PA (CHIR ) CHIRON CORP.
XX PA (INDV ) UNIV INDIANA.
XX PI Srivastava A, Ponnazhagan S, Chloemer RH, Wang X, Yoder MC;
XX PI Zhou S, Escobedo J, Dwarki V;
XX WPI; 1998-193255/17.
XX DR Novel adeno-associated viral vectors - for liver specific delivery of
XX PT therapeutic molecule.
XX PS Example 1; Page 19; 32pp; English.
XX CC The lacZ-specific primers (AAV26433 and 26434) were used to amplify and
XX CC detect the lacZ gene which had been injected into C57Bl/6 mice using a
XX CC recombinant adeno-associated virus (AAV) vector. This confirmed the adeno
XX CC -associated virus vector can be used to deliver a therapeutic molecule to
XX CC the liver of a mammal. This can be used for the expression of therapeutic
XX CC molecules such as secretory proteins, antisense molecules or ribozymes,
XX CC in the liver, especially to treat hepatic diseases
XX SQ Sequence 19 BP; 3 A; 1 C; 9 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 6.9e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 223 GATGAGAGTGGTGGTGGT 241
Db 1 GATGAGCGTGGTGGTTATG 19

RESULT 628
AAAX17888/c
ID AAAX17888 standard; DNA; 19 BP.
AC AAAX17888;
DT 11-MAY-1999 (first entry)
DE Anti-CMV oligonucleotide #4376.
XX Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;
XX cytomagalovirus; inhibition; replication; sugar modification;
XX phosphorothioate; infection; retinitis; ss.
XX Synthetic.
XX OS Human herpesvirus 5.
XX PN WO9845314-A1.
XX PD 15-OCT-1998.
XX PF 07-APR-1998; 98WO-US006895.
XX PR 09-APR-1997; 97US-00838715.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Draper KG, Kisner DL, Anderson KP, Chapman S;
XX WPI; 1998-568330/48.
XX DR New antisense oligonucleotides that target cytomegalovirus nucleic acid -
XX PT particularly including 2-methoxyethoxy sugar modifications, especially
XX PT for treating viral retinitis, with long-lasting retention in the retina.
XX PS Claim 7; Page 30; 99pp; English.
XX CC Antisense oligonucleotides (AAAX17861-X17924) are targeted to a nucleic
XX CC acid (AAAX17925-X17948) encoding IE (immediate early) 1 or 2, or DNA
XX CC polymerase of cytomegalovirus (CMV) and are able to inhibit CMV
XX CC replication. Optionally the oligonucleotides include at least one 2'-(2-
XX CC methoxyethoxy) sugar modification or phosphorothioate internucleotide
XX CC linkages. The oligonucleotides are used to inhibit CMV infections (by in
XX CC vivo or in vitro contact with cells, tissues or body fluids), especially
XX CC to treat or prevent CMV infections, particularly retinitis

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DR WPI; 1998-568330/48.
XX New antisense oligonucleotides that target cytomegalovirus nucleic acid -
XX PT particularly including 2-methoxyethoxy sugar modifications, especially
XX PT for treating viral retinitis, with long-lasting retention in the retina.
XX PS Disclosure; Page 30; 99pp; English.
XX CC Antisense oligonucleotides (AAAX17861-X17924) are targeted to a nucleic
XX CC acid (AAAX17925-X17948) encoding IE (immediate early) 1 or 2, or DNA
XX CC polymerase of cytomegalovirus (CMV) and are able to inhibit CMV
XX CC replication. Optionally the oligonucleotides include at least one 2'-(2-
XX CC methoxyethoxy) sugar modification or phosphorothioate internucleotide
XX CC linkages. The oligonucleotides are used to inhibit CMV infections (by in
XX CC vivo or in vitro contact with cells, tissues or body fluids), especially
XX CC to treat or prevent CMV infections, particularly retinitis
XX SQ Sequence 19 BP; 0 A; 6 C; 3 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 6.9e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 131 GGATGAAGAAGATCAACG 149
Db 19 GCAAGAAGAAGACCAACG 1.

RESULT 629
AAAX17895/c
ID AAAX17895 standard; DNA; 19 BP.
XX AC AAAX17895;
XX DT 11-MAY-1999 (first entry)
XX DE Anti-CMV oligonucleotide #5481.
XX KW Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;
XX cytomagalovirus; inhibition; replication; sugar modification;
XX phosphorothioate; infection; retinitis; ss.
XX OS Synthetic.
XX OS Human herpesvirus 5.
XX PN WO9845314-A1.
XX PD 15-OCT-1998.
XX PF 07-APR-1998; 98WO-US006895.
XX PR 09-APR-1997; 97US-00838715.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Draper KG, Kisner DL, Anderson KP, Chapman S;
XX WPI; 1998-568330/48.
XX DR New antisense oligonucleotides that target cytomegalovirus nucleic acid -
XX PT particularly including 2-methoxyethoxy sugar modifications, especially
XX PT for treating viral retinitis, with long-lasting retention in the retina.
XX PS Claim 7; Page 30; 99pp; English.
XX CC Antisense oligonucleotides (AAAX17861-X17924) are targeted to a nucleic
XX CC acid (AAAX17925-X17948) encoding IE (immediate early) 1 or 2, or DNA
XX CC polymerase of cytomegalovirus (CMV) and are able to inhibit CMV
XX CC replication. Optionally the oligonucleotides include at least one 2'-(2-
XX CC methoxyethoxy) sugar modification or phosphorothioate internucleotide
XX CC linkages. The oligonucleotides are used to inhibit CMV infections (by in
XX CC vivo or in vitro contact with cells, tissues or body fluids), especially
XX CC to treat or prevent CMV infections, particularly retinitis

```


DR WPI; 2000-412314/35.
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.
XX Disclosure; Page 53; 109pp; English.
PS
XX The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
XX restenosis treatment
XX
SQ Sequence 19 BP; 2 A; 2 C; 8 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 6.9e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1158 GTGGGTGTGGGTGCATC 1176
DB 1 GTGGAGTGTGGTGTATC 19

RESULT 633
AAA83090
ID AAA83090 standard; DNA; 19 BP.
AC AAA83090;
XX
XX 04-DEC-2000 (first entry)
DT
DE cdk7 ribozyme binding site #11.
XX
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX Mammalia.
XX WO200032765-A2.
XX 08-JUN-2000.
XX
XX 06-DEC-1999; 99WO-US028772.
XX
XX 04-DEC-1998; 98US-0110954P.
XX (IMMU-) IMMUSOL INC.
XX
XX Tritz R, Welch PJ, Barber JR, Robbins JM;
XX WPI; 2000-412314/35.
XX
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
DE RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
XX PCNA and Cyclin B1.
XX Disclosure; Page 56; 109pp; English.
XX
XX The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
XX restenosis treatment
XX
SQ Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 6.9e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 652 GCCACCGTCTACAAAGGCA 670
DB 1 GCCACCGTCTACAAAGGCA 19

RESULT 634
AAA82766
ID AAA82766 standard; DNA; 19 BP.
XX
XX AAA82766;
AC
XX 04-DEC-2000 (first entry)
DT
DE cdk3 ribozyme binding site #51.
XX
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX Mammalia.
XX WO200032765-A2.
XX 08-JUN-2000.
XX
XX 06-DEC-1999; 99WO-US028772.
XX
XX 04-DEC-1998; 98US-0110954P.
XX (IMMU-) IMMUSOL INC.
XX
XX Tritz R, Welch PJ, Barber JR, Robbins JM;
XX WPI; 2000-412314/35.
XX
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
DE RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
XX PCNA and Cyclin B1.
XX Disclosure; Page 51; 109pp; English.
XX
XX The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
XX restenosis treatment
XX
SQ Sequence 19 BP; 2 A; 8 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 6.9e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1094 CACTGTGTGTACGCGCCCC 1112
DB 1 CACTGTGTGTACGCGCCCC 19

RESULT 635
AAA82998
ID AAA82998 standard; DNA; 19 BP.
XX
XX AAA82998;
AC
XX 04-DEC-2000 (first entry)
DT
XX cdk6 ribozyme binding site #58.
DE
XX

QY 1167 GGGCTGCATCTTCTATGAG 1185
DB 1 GGGCTGCATCTTGTCTAG 19
RESULT 638
AA82664
ID AAA82664 standard; DNA; 19 BP.
XX
AC AAA82664;
XX
DT 04-DEC-2000 (first entry)
XX
DE cdk2 ribozyme binding site #101.
XX
KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
OS Mammalia.
XX
PN WO200032765-A2.
XX
PD 08-JUN-2000.
XX
PF 06-DEC-1999; 99WO-US028772.
XX
PR 04-DEC-1998; 98US-0110954P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Tritz R, Welch PJ, Barber JR, Robbins JM;
XX
DR WPI; 2000-412314/35.
XX
PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.
XX
PS Disclosure; Page 49; 109pp; English.
XX
SQ Sequence 19 BP; 3 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 6.9e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
The present invention relates to a hairpin or hammerhead ribozyme,
designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX
QY 1170 CTGCATCTTCTATGAGATG 1188
DB 1 CTGCATCTTGTCTAGATG 19
RESULT 639
AAA83089
ID AAA83089 standard; DNA; 19 BP.
XX
AC AAA83089;
XX
DT 04-DEC-2000 (first entry)
XX
DE cdk7 ribozyme binding site #10.
XX
KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
OS Mammalia.

XX WO200032765-A2.
XX
PD 08-JUN-2000.
XX
PF 06-DEC-1999; 99WO-US028772.
XX
PR 04-DEC-1998; 98US-0110954P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Tritz R, Welch PJ, Barber JR, Robbins JM;
XX
DR WPI; 2000-412314/35.
XX
PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.
XX
PS Disclosure; Page 56; 109pp; English.
XX
SQ Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 6.9e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
The present invention relates to a hairpin or hammerhead ribozyme,
designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX
QY 651 TGGCACCGTCTACAAAGGC 669
DB 1 TGGCACCGTTTACAGGCC 19
RESULT 640
AAZ40735/C
ID AAZ40735 standard; DNA; 19 BP.
XX
AC AAZ40735;
XX
DT 21-FEB-2000 (first entry)
XX
DE Primer 1 used in the sequencing of VhalphatAG.
XX
KW VhalphatAG; anti-tumour associated sialylated glycoprotein antigen;
KW TAG-72; variable region; heavy chain; carcinoma; detect; tumour; ss;
KW mouse-human chimeric antibody; therapeutic agent; intraoperative therapy;
KW primer.
XX
OS Synthetic.
OS Mus sp.
XX
PN US5993813-A.
XX
PD 30-NOV-1999.
XX
PF 24-MAR-1997; 97US-00822028.
XX
PR 19-OCT-1988; 88US-00259943.
PR 24-OCT-1988; 88US-00261942.
PR 19-OCT-1989; 89US-00424362.
PR 31-MAR-1993; 93US-00040687.
XX
PA (DOWC) DOW CHEM CO.
XX
PI Mezes PS, Gourlie BB, Schlom J, Kaplan DA, Anderson WHK;

PI Rixon MW;
XX WPI; 2000-038240/03.
XX
XX New mouse-human chimeric antibody, useful for in vivo diagnosis of
XX cancer.
XX
XX Example; Col 37; 120pp; English.
XX
XX Primers AAZ40735-Z40740 are used to sequence the VhalpharAG germline
XX gene, used in the invention. The invention relates to a new anti-tumour
XX associated sialylated glycoprotein antigen (TAG)-72 mouse-human chimeric
XX antibody. The variable region has a heavy chain (VH) where VH is encoded
XX by a DNA sequence homologous to the VhalpharAG germline gene (AAZ40701).
XX The invention includes a method for in vivo carcinoma targeting through
XX the administration to an animal of an anti-TAG-72 mouse-human chimeric
XX antibody produced by specific cell lines. The antibody or a fragment are
XX conjugated to an imaging marker or therapeutic agent, in a
XX pharmaceutically acceptable, nontoxic, sterile carrier. The chimeric
XX antibody binds to TAG-72 which is found on certain human tumour cells.
XX The tissue regions containing the tumours can be detected via the markers
XX and/or can be treated via the therapeutic agents. The method is useful
XX for in vivo diagnosis and treatment of cancer by administering to an
XX animal an effective amount of a composition for the in situ detection of
XX carcinoma lesions. The method is useful for intraoperative therapy,
XX consisting of locating the position of a tumour through the
XX administration of the antibody, followed by excising the tumour
XX
XX Sequence 19 BP; 4 A; 5 C; 2 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 6.9e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1293 CTCACAGCAGGAGTTCAG 1311
DB 19 CTCACAGCAGGAGTTCAG 1
RESULT 641
AAF72367/c
ID AAF72367 standard; DNA; 19 BP.
XX
XX AAF72367;
AC
XX 23-APR-2001 (first entry)
DT
XX PCR primer specific for IFN α 2 gene SEQ ID 51.
DE
XX Human; keratinocyte derived interferon; KDI; viral infection; lymphoma;
XX immune system related disorder; cancer; multiple sclerosis; AIDS;
XX hepatitis; Cryptosporidium parvum infection; leukaemia; arthritis;
XX diabetes; allergy; chronic myelogenous leukaemia; PCR primer; ss.
XX
XX Synthetic.
OS
XX WO200107608-A1.
PN
XX 01-FEB-2001.
PD
XX 20-JAN-2000; 2000WO-US001239.
PF
XX 21-JUL-1999; 99US-00358587.
PR
XX 21-JUL-1999; 99WO-US016424.
XX
XX (HUMA-) HUMAN GENOME SCI INC.
PA
XX
XX Ruben SM, Moore PA, Lafleur DW;
PI
XX WPI; 2001-138557/14.
XX
XX Isolated keratinocyte derived interferon protein and polynucleotide used
XX to prevent, treat or ameliorate an immune system-related disorder, viral

PT infection, viral exposure and cancer.
XX
XX Example 5; Page 187; 303pp; English.
XX
XX This invention relates to human polynucleotide sequence AAF72333 which
XX encodes keratinocyte derived interferon (KDI) protein AAB49774, which is
XX a member of the interferon family. AAF72338 represents the codon
XX optimised sequence of KDI. The human KDI gene is located on chromosome 9.
XX The specification includes KDI related protein sequences AAB49775 -
XX AAB49789. Also given in the specification are primer, probe and
XX polynucleotide sequences represented by AAF72334-AAF72370 (excluding
XX AAF72338) which are used in the isolation and characterisation of the KDI
XX sequence of the invention. The KDI polypeptide is used to treat viral
XX infections and the protein and polynucleotide may be used to prevent,
XX treat or ameliorate a medical condition such as immune system-related
XX disorder, viral infection, viral exposure and cancer in a mammal.
XX Specific disorders which can be treated by KDI include multiple
XX sclerosis, lymphoma, acquired immune deficiency syndrome, viral
XX hepatitis, Cryptosporidium parvum infection, chronic myelogenous
XX leukaemia, arthritis, diabetes and allergies
XX
XX Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 6.9e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 926 TCCAGCTGCTCCGTGGCCT 944
DB 19 TCAGCTGCTCTGGGCT 1
RESULT 642
AAF91206/c
ID AAF91206 standard; DNA; 19 BP.
XX
XX AAF91206;
AC
XX 04-MAY-2001 (first entry)
DT
XX Human multi drug resistance-1 gene related sequence SEQ ID NO: 293.
DE
XX Human; MDR-1; multi drug resistance-1; drug uptake; disease; cancer;
XX inflammatory disease; neuronal disease; CNS disease;
XX cardiovascular disease; PCR primer; ss.
XX
XX Homo sapiens.
OS
XX WO200109183-A2.
PN
XX 08-FEB-2001.
PD
XX 28-JUL-2000; 2000WO-EF007314.
PF
XX 30-JUL-1999; 99EP-00114938.
PR
XX 22-FEB-2000; 2000EP-00103361.
XX
XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
PA
XX
XX Brinkmann U, Hoffmeyer S, Eichelbaum M, Roots I;
PI
XX WPI; 2001-159855/16.
XX
XX New polynucleotide encoding a molecular variant Multi Drug Resistance
XX (MDR)-1 polypeptide is useful for diagnosing and treating diseases
XX associated with abnormal MDR-1 expression or function, e.g. cancer.
XX
XX Claim 1; Page 137; 154pp; English.
PS
XX The present invention provides nucleotides encoding molecular variants of
XX the human multi drug resistance-1 (MDR-1) protein. These can be used to
XX identify compounds capable of treating multidrug resistance and
XX sensitivity interfering resulting from polymorphisms in MDR-1, which can

CC lead to difficulties in treating cancer, cardiovascular, neuronal,
XX inflammatory and CNS diseases
SQ Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 6.9e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 388 TCCTCGGATGAGTGCAGT 406
|||||
Db 19 TCCTCTGAGGATGTGCAGT 1

RESULT 643
AAF91205
ID AAF91205 standard; DNA; 19 BP.
XX
AC AAF91205;
XX
DT 04-MAY-2001 (first entry)
XX
DE Human multi drug resistance-1 gene related sequence SEQ ID NO: 292.
XX
KW Human; MDR-1; multi drug resistance-1; drug uptake; disease; cancer;
XX inflammatory disease; neuronal disease; CNS disease;
KW cardiovascular disease; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200109183-A2.
XX
PD 08-FEB-2001.
XX
PF 28-JUL-2000; 2000WO-EP007314.
XX
PR 30-JUL-1999; 99EP-00114938.
XX
PR 22-FEB-2000; 2000EP-00103361.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Brinkmann U, Hoffmeyer S, Eichelbaum M, Roots I;
XX
DR WPI; 2001-159855/16.

XX New polynucleotide encoding a molecular variant Multi Drug Resistance
PT (MDR)-1 polypeptide is useful for diagnosing and treating diseases
PT associated with abnormal MDR-1 expression or function, e.g. cancer.
XX
PS Claim 1; Page 137; 154pp; English.
XX
CC The present invention provides nucleotides encoding molecular variants of
CC the human multi drug resistance-1 (MDR-1) protein. These can be used to
CC identify compounds capable of treating multidrug resistance and
CC sensitivity interfering resulting from polymorphisms in MDR-1, which can
CC lead to difficulties in treating cancer, cardiovascular, neuronal,
CC inflammatory and CNS diseases
XX
SQ Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 6.9e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 388 TCCTCGGATGAGTGCAGT 406
|||||
Db 1 TCCTCTGAGGATGTGCAGT 19

RESULT 644
AAH57928
ID AAH57928 standard; DNA; 19 BP.
XX

AC AAH57928;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:352.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnery;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
XX
OS Synthetic.

XX WO200130362-A2.

XX 03-MAY-2001.

XX 26-OCT-2000; 2000WO-US029500.

XX 26-OCT-1999; 99US-0161532P.

XX (IMMU-) IMMUSOL INC.

XX Robbins JM, Tritz R;

XX WPI; 2001-300427/31.

XX Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.

XX Example 1; Page 97; 408pp; English.

XX The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC ophthalmological, vulnery, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH52099 represent sequences used in the
CC exemplification of the present invention
XX

SQ Sequence 19 BP; 2 A; 8 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 6.9e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1094 CACTGTGTGTTACCGCCCC 1112
|||||
Db 1 CACTGTGTGTTATCGCCCC 19

RESULT 645
AAH58160

ID AAH58160 standard; DNA; 19 BP.

XX AC AAH58160;

XX DT 10-SEP-2001 (first entry)

XX DE Cell-cycle dependent kinase cdk6 ribozyme binding site SEQ ID NO:584.

XX KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;

XX KW recognition site; target; ribozyme binding site; eye disease; vulnery;

XX KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;

XX KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;

XX KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;

XX KW antipsoiatric; dermatological; antiseborrheic; antidiabetic; virucide;

XX KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;

XX KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;

XX KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;

XX KW sickle cell retinopathy; ss.

XX OS Homo sapiens.

XX OS Synthetic.

XX PN WO200130362-A2.

XX PD 03-MAY-2001.

XX PF 26-OCT-2000; 2000WO-US029500.

XX PR 26-OCT-1999; 99US-0161532P.

XX PA (IMMU-) IMMUSOL INC.

XX PI Robbins JM, Tritz R;

XX PI WPI; 2001-300427/31.

XX DR Treating proliferative skin or eye diseases and scarring, using ribozymes

XX PT that cleave RNA encoding cytokines involved in inflammation, matrix

XX PT metalloproteinases, growth factors and cell-cycle dependent kinases.

XX PS Example 1; Page 114; 408pp; English.

XX CC The present invention describes a method for treating a proliferative

XX CC skin or eye disease and scarring. The method involves administering a

XX CC ribozyme (I) which cleaves RNA encoding a cytokine involved in

XX CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle

XX CC dependent kinase, growth factor or a reductase, or administering a

XX CC nucleic acid molecule (II) comprising a promoter operably linked to a

XX CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,

XX CC ophthalmological, vulnery, keratolytic and virucide activities, and

XX CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used

XX CC in gene therapy. (I) and (II) are useful for treating proliferative skin

XX CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,

XX CC squamous or basal cell carcinoma and viral or seborrheic wart. They can

XX CC also be used for treating proliferative eye diseases such as diabetic

XX CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retnopathy of

RESULT 646

XX AAH58252

XX ID AAH58252 standard; DNA; 19 BP.

XX AC AAH58252;

XX DT 10-SEP-2001 (first entry)

XX DE Cell-cycle dependent kinase cdk7 ribozyme binding site SEQ ID NO:676.

XX KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;

XX KW recognition site; target; ribozyme binding site; eye disease; vulnery;

XX KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;

XX KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;

XX KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;

XX KW antipsoiatric; dermatological; antiseborrheic; antidiabetic; virucide;

XX KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;

XX KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;

XX KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;

XX KW sickle cell retinopathy; ss.

XX OS Homo sapiens.

XX OS Synthetic.

XX PN WO200130362-A2.

XX PD 03-MAY-2001.

XX PF 26-OCT-2000; 2000WO-US029500.

XX PR 26-OCT-1999; 99US-0161532P.

XX PA (IMMU-) IMMUSOL INC.

XX PI Robbins JM, Tritz R;

XX PI WPI; 2001-300427/31.

XX DR Treating proliferative skin or eye diseases and scarring, using ribozymes

XX PT that cleave RNA encoding cytokines involved in inflammation, matrix

XX PT metalloproteinases, growth factors and cell-cycle dependent kinases.

XX PS Example 1; Page 121; 408pp; English.

XX CC The present invention describes a method for treating a proliferative

XX CC skin or eye disease and scarring. The method involves administering a

XX CC ribozyme (I) which cleaves RNA encoding a cytokine involved in

XX CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle

XX CC dependent kinase, growth factor or a reductase, or administering a

XX CC nucleic acid molecule (II) comprising a promoter operably linked to a

XX CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,

XX CC ophthalmological, vulnery, keratolytic and virucide activities, and

XX CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used

XX CC in gene therapy. (I) and (II) are useful for treating proliferative skin

XX CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,

XX CC squamous or basal cell carcinoma and viral or seborrheic wart. They can

XX SQ Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

XX Query Match 0.8%; Score 14.2; DB 1; Length 19;

XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;

XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

XX QY 652 GCACCGTCTACAAAGGCA 670

XX DB 1 GCACCGTCTACAGGCCA 19

```
RESULT 647
AAH58251
ID AAH58251 standard; DNA; 19 BP.
XX AC
XX AAH58251;
XX AC
XX 10-SEP-2001 (first entry)
XX DT
XX DE
XX Cell-cycle dependent kinase cdk7 ribozyme binding site SEQ ID NO:675.
XX DE
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX recognition site; target; ribozyme binding site; eye disease; vulnery;
XX proliferative disease; skin disease; psoriasis; diabetic retinopathy;
XX cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
XX matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
XX antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
XX antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
XX atopic dermatitis; actinic keratosis; squamous cell carcinoma;
XX basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
XX sickle cell retinopathy; ss.
XX KW
XX Homo sapiens.
XX OS
XX Synthetic.
XX PN
XX WO200130362-A2.
XX PD
XX 03-MAY-2001.
XX XX
XX 26-OCT-2000; 2000WO-US029500.
XX PF
XX 26-OCT-1999; 99US-0161532P.
XX PR
XX (IMMU-) IMMUSOL INC.
XX PA
XX Robbins JM, Tritz R;
XX PI
XX WPI; 2001-300427/31.
XX DR
XX
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
XX that cleave RNA encoding cytokines involved in inflammation, matrix
XX metalloproteinases, growth factors and cell-cycle dependent kinases.
XX PT
XX Example 1; Page 121; 408pp; English.
XX PS
XX The present invention describes a method for treating a proliferative
XX skin or eye disease and scarring. The method involves administering a
XX ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX dependent kinase, growth factor or a reductase, or administering a
XX nucleic acid molecule (II) comprising a promoter operably linked to a
XX dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
XX ophthalmological, vulnery, keratolytic and virucide activities, and
XX cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX in gene therapy. (I) and (II) are useful for treating proliferative skin
XX diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX also be used for treating proliferative eye diseases such as diabetic
XX retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
XX prematurity and retinal detachment, and for treating and preventing
XX scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
XX scar. AAH57577 to AAH62099 represent sequences used in the
XX exemplification of the present invention
XX CC
XX Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 651 TGCCACCGTCTACAAAGGC 669
XX
```

Qy 1:58 GTGGGGTGTGGGTGCATC 1176
|||||
Db 1 GTGGAGTGTGGGTGCATC 19

RESULT 649

AAH57792
ID AAH57792 standard; DNA; 19 BP.

XX AC AAH57792;

XX DT 10-SEP-2001 (first entry)

XX DE Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:216.

XX KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnary;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisking; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
XX KW sickle cell retinopathy; ss.

XX OS Homo sapiens.

XX OS Synthetic.

XX PN WO200130362-A2.

XX XX 03-MAY-2001.

XX PD 26-OCT-2000; 2000WO-US029500.

XX PF 26-OCT-1999; 99US-0161532P.

XX PR (IMMU-) IMMUSOL INC.

XX PA Robbins JM, Tritz R;

XX PI WPI; 2001-300427/31.

XX DR Treating proliferative skin or eye diseases and scarring, using ribozymes
XX PT that cleave RNA encoding cytokines involved in inflammation, matrix
XX PT metalloproteinases, growth factors and cell-cycle dependent kinases.

XX PS Example 1; Page 87; 408pp; English.

XX CC The present invention describes a method for treating a proliferative
XX CC skin or eye disease and scarring. The method involves administering a
XX CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX CC dependent kinase, growth factor or a reductase, or administering a
XX CC nucleic acid molecule (II) comprising a promoter operably linked to a
XX CC nucleic acid segment encoding (I). (I) can have antiproliferative,
XX CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisking,
XX CC ophthalmological, vulnary, keratolytic and virucide activities, and
XX CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX CC in gene therapy. (I) and (II) are useful for treating proliferative skin
XX CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX CC also be used for treating proliferative eye diseases such as diabetic
XX CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
XX CC prematurity and retinal detachment, and for treating and preventing
XX CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
XX CC scar. AAH57577 to AAH62099 represent sequences used in the
XX CC exemplification of the present invention

SQ Sequence 19 BP; 6 A; 7 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;

Best Local Similarity 84.2%; Pred. No. 6.9e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 975 CCGAGACCTCAAGCCCCAG 993

|||||

Db 1 CCGAGACCTTAAACCTCAG 19

RESULT 650

AAH57793

ID AAH57793 standard; DNA; 19 BP.

XX AC AAH57793;

XX DT 10-SEP-2001 (first entry)

XX DE Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:217.

XX KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnary;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisking; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
XX KW sickle cell retinopathy; ss.

XX OS Homo sapiens.

XX OS Synthetic.

XX PN WO200130362-A2.

XX XX 03-MAY-2001.

XX PD 26-OCT-2000; 2000WO-US029500.

XX PF 26-OCT-1999; 99US-0161532P.

XX PR (IMMU-) IMMUSOL INC.

XX PA Robbins JM, Tritz R;

XX PI WPI; 2001-300427/31.

XX DR Treating proliferative skin or eye diseases and scarring, using ribozymes
XX PT that cleave RNA encoding cytokines involved in inflammation, matrix
XX PT metalloproteinases, growth factors and cell-cycle dependent kinases.

XX PS Example 1; Page 87; 408pp; English.

XX CC The present invention describes a method for treating a proliferative
XX CC skin or eye disease and scarring. The method involves administering a
XX CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX CC dependent kinase, growth factor or a reductase, or administering a
XX CC nucleic acid molecule (II) comprising a promoter operably linked to a
XX CC nucleic acid segment encoding (I). (I) can have antiproliferative,
XX CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisking,
XX CC ophthalmological, vulnary, keratolytic and virucide activities, and
XX CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX CC in gene therapy. (I) and (II) are useful for treating proliferative skin
XX CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX CC also be used for treating proliferative eye diseases such as diabetic
XX CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
XX CC prematurity and retinal detachment, and for treating and preventing
XX CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
XX CC scar. AAH57577 to AAH62099 represent sequences used in the
XX CC exemplification of the present invention

SQ Sequence 19 BP; 7 A; 6 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. NO. 6.9e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 976 CGAGACCTCAAGCCCGAGA 994
|||||
Db 1 CGAGACCTTAAACCTCAGA 19
|||||

RESULT 651
AAH57825
ID AAH57825 standard; DNA; 19 BP.
XX AC AAH57825;
XX DT 10-SEP-2001 (first entry)
XX DE Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:249.
XX DE Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnary;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytosolic;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX PN WO2001130362-A2.
XX PD 03-MAY-2001.
XX PF 26-OCT-2000; 2000WO-US029500.
XX PR 26-OCT-1999; 99US-0161532P.
XX PA (IMMU-) IMMUSOL INC.
XX PI Robbins JM, Tritz R;
XX WPI; 2001-300427/31.
XX DR Treating proliferative skin or eye diseases and scarring, using ribozymes
XX PT that cleave RNA encoding cytokines involved in inflammation, matrix
XX PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX PS Example 1; Page 90; 408pp; English.
XX CC The present invention describes a method for treating a proliferative
XX CC skin or eye disease and scarring. The method involves administering a
XX CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX CC dependent kinase, growth factor or a reductase, or administering a
XX CC nucleic acid molecule (II) comprising a promoter operably linked to a
XX CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
XX CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
XX CC ophthalmological, vulnary, keratolytic and virucide activities, and
XX CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX CC in gene therapy. (I) and (II) are useful for treating proliferative skin
XX CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX CC also be used for treating proliferative eye diseases such as diabetic
XX CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
XX CC prematurity and retinal detachment, and for treating and preventing
XX CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
XX CC scar. AAH57577 to AAH62099 represent sequences used in the
XX CC exemplification of the present invention

XX SQ Sequence 19 BP; 3 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. NO. 6.9e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1169 GCTGCATCTTCTATGAGAT 1187
|||||
Db 1 GCTGCATCTTGTGAGAT 19
|||||

RESULT 652
AAH57824
ID AAH57824 standard; DNA; 19 BP.
XX AC AAH57824;
XX DT 10-SEP-2001 (first entry)
XX DE Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:248.
XX DE Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnary;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytosolic;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX PN WO2001130362-A2.
XX PD 03-MAY-2001.
XX PF 26-OCT-2000; 2000WO-US029500.
XX PR 26-OCT-1999; 99US-0161532P.
XX PA (IMMU-) IMMUSOL INC.
XX PI Robbins JM, Tritz R;
XX WPI; 2001-300427/31.
XX DR Treating proliferative skin or eye diseases and scarring, using ribozymes
XX PT that cleave RNA encoding cytokines involved in inflammation, matrix
XX PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX PS Example 1; Page 90; 408pp; English.
XX CC The present invention describes a method for treating a proliferative
XX CC skin or eye disease and scarring. The method involves administering a
XX CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX CC dependent kinase, growth factor or a reductase, or administering a
XX CC nucleic acid molecule (II) comprising a promoter operably linked to a
XX CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
XX CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
XX CC ophthalmological, vulnary, keratolytic and virucide activities, and
XX CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX CC in gene therapy. (I) and (II) are useful for treating proliferative skin
XX CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX CC also be used for treating proliferative eye diseases such as diabetic
XX CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
XX CC prematurity and retinal detachment, and for treating and preventing
XX CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn

CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 19 BP; 2 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 6.9e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX

QY 1167 GGCGTCACATCTCTATGAG 1185
|||||
Db 1 GGCGTCACATCTCTGCTGAG 19

RESULT 653
AAH57826
ID AAH57826 standard; DNA; 19 BP.
XX
AC AAH57826;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:250.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulvectomy;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200130362-A2.
XX
PD 03-MAY-2001.
XX
PF 26-OCT-2000; 2000WO-US029500.
XX
PR 26-OCT-1999; 99US-0161532P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Robbins JM, Tritz R;
XX
DR WPI; 2001-300427/31.
XX
PT Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
PS Example 1; Page 90; 408pp; English.
XX

CC The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antiproliferative,
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC ophthalmological, vulvectomy, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of

CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 19 BP; 3 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 6.9e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX

QY 1170 CTGCATCTTCTATGAGATG 1188
|||||
Db 1 CTGCATCTTCTGCTGAGATG 19

RESULT 654
ABL88859
ID ABL88859 standard; DNA; 19 BP.
XX
AC ABL88859;
XX
DT 22-MAY-2002 (first entry)
XX
DE HIV-1 related binding molecule oligonucleotide sequence SEQ ID NO:81.
XX
KW Binding molecule; HIV-1; human immunodeficiency virus type 1;
KW reverse transcriptase; binding group; ss.
XX
OS Human immunodeficiency virus 1.
OS Synthetic.
XX
PN EP1174518-A1.
XX
PD 23-JAN-2002.
XX
PF 20-JUL-2000; 2000EP-00202611.
XX
PR 20-JUL-2000; 2000EP-00202611.
XX
PA (AMST-) AMSTERDAM SUPPORT DIAGNOSTICS BV.
XX
PI Loukachov VV, Van Gemen B, Goudsmit J;
XX
DR WPI; 2002-156696/21.
XX
PT Collection of binding groups for determining or typing samples,
PT especially clinical samples, has groups capable to identify essentially
PT all members of the family of nucleic acids of relatively high
PT significance.
XX
PS Disclosure; Page 26; 166pp; English.
XX

CC The present invention describes a collection of binding groups for a
CC family of nucleic acids comprising members of relative high and relative
CC low significance, where the binding groups are selected to be capable to
CC identify, alone or in combination, essentially all members of the family
CC of nucleic acids of relatively high significance. The collection of
CC binding groups is useful for typing of nucleic acid in a clinical sample,
CC by contacting the nucleic acid with the collection and determining
CC whether one or more binding groups bound to the nucleic acid of the
CC sample. This method is useful for determining whether the sample
CC comprises at least a part of a member of relatively high significance
CC of a family of nucleic acids. The collection of binding groups is useful for
CC diagnosing the severity of a disease caused by a pathogen containing a
CC member of a family of nucleic acids. ABL88779 to ABL89321 represent
CC oligonucleotide sequences used in the exemplification of the present
CC invention
XX
SQ Sequence 19 BP; 8 A; 4 C; 2 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 6.9e+02;

```
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1505 CCATATTGCACTAAGGA 1523
DB 1 CCATATTGCCATAAGAA 19

RESULT 655
ABL88857
KW ABL88857 standard; DNA; 19 BP.
XX
XX ABL88857;
XX
XX 22-MAY-2002 (first entry)
XX
XX HIV-1 related binding molecule oligonucleotide sequence SEQ ID NO:79.
XX
XX Binding molecule; HIV-1; human immunodeficiency virus type 1;
KW reverse transcriptase; binding group; ss.
XX
XX Human immunodeficiency virus 1.
OS Synthetic.
XX
XX EP1174518-A1.
XX
XX 23-JAN-2002.
XX
XX 20-JUL-2000; 2000EP-00202611.
XX
XX 20-JUL-2000; 2000EP-00202611.
XX
XX (AMST-) AMSTERDAM SUPPORT DIAGNOSTICS BV.
XX
XX Loukachov VV, Van Gemen B, Goudsmit J;
XX
XX WPI; 2002-156696/21.
XX
XX Collection of binding groups for determining or typing samples,
XX especially clinical samples, has groups capable to identify essentially
XX all members of the family of nucleic acids of relatively high
XX significance.
XX
XX Disclosure; Page 26; 166pp; English.
XX
XX The present invention describes a collection of binding groups for a
XX family of nucleic acids comprising members of relative high and relative
XX low significance, where the binding groups are selected to be capable to
XX identify, alone or in combination, essentially all members of the family
XX of nucleic acids of relatively high significance. The collection of
XX binding groups is useful for typing of nucleic acid in a clinical sample,
XX by contacting the nucleic acid with the collection and determining
XX whether one or more binding groups bound to the nucleic acid of the
XX sample. This method is useful for determining whether the sample
XX comprises at least a part of a member of relatively high significance of
XX a family of nucleic acids. The collection of binding groups is useful for
XX diagnosing the severity of a disease caused by a pathogen containing a
XX member of a family of nucleic acids. ABL88779 to ABL89321 represent
XX oligonucleotide sequences used in the exemplification of the present
XX invention
XX
XX Sequence 19 BP; 8 A; 3 C; 3 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1505 CCATATTGCACTAAGGA 1523
DB 1 CCATATTGCCATAAGAA 19

RESULT 656
ABL88851
KW ABL88851 standard; DNA; 19 BP.
XX
XX ABL88851;
XX
XX 22-MAY-2002 (first entry)
XX
XX HIV-1 related binding molecule oligonucleotide sequence SEQ ID NO:73.
XX
XX Binding molecule; HIV-1; human immunodeficiency virus type 1;
KW reverse transcriptase; binding group; ss.
XX
XX Human immunodeficiency virus 1.
OS Synthetic.
XX
XX EP1174518-A1.
XX
XX 23-JAN-2002.
XX
XX 20-JUL-2000; 2000EP-00202611.
XX
XX 20-JUL-2000; 2000EP-00202611.
XX
XX (AMST-) AMSTERDAM SUPPORT DIAGNOSTICS BV.
XX
XX Loukachov VV, Van Gemen B, Goudsmit J;
XX
XX WPI; 2002-156696/21.
XX
XX Collection of binding groups for determining or typing samples,
XX especially clinical samples, has groups capable to identify essentially
XX all members of the family of nucleic acids of relatively high
XX significance.
XX
XX Disclosure; Page 24; 166pp; English.
XX
XX The present invention describes a collection of binding groups for a
XX family of nucleic acids comprising members of relative high and relative
XX low significance, where the binding groups are selected to be capable to
XX identify, alone or in combination, essentially all members of the family
XX of nucleic acids of relatively high significance. The collection of
XX binding groups is useful for typing of nucleic acid in a clinical sample,
XX by contacting the nucleic acid with the collection and determining
XX whether one or more binding groups bound to the nucleic acid of the
XX sample. This method is useful for determining whether the sample
XX comprises at least a part of a member of relatively high significance of
XX a family of nucleic acids. The collection of binding groups is useful for
XX diagnosing the severity of a disease caused by a pathogen containing a
XX member of a family of nucleic acids. ABL88779 to ABL89321 represent
XX oligonucleotide sequences used in the exemplification of the present
XX invention
XX
XX Sequence 19 BP; 8 A; 3 C; 3 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
ID ABL88851 standard; DNA; 19 BP.
XX
XX ABL88851;
XX
XX 22-MAY-2002 (first entry)
XX
XX HIV-1 related binding molecule oligonucleotide sequence SEQ ID NO:73.
XX
XX Binding molecule; HIV-1; human immunodeficiency virus type 1;
KW reverse transcriptase; binding group; ss.
XX
XX Human immunodeficiency virus 1.
OS Synthetic.
XX
XX EP1174518-A1.
XX
XX 23-JAN-2002.
XX
XX 20-JUL-2000; 2000EP-00202611.
XX
XX 20-JUL-2000; 2000EP-00202611.
XX
XX (AMST-) AMSTERDAM SUPPORT DIAGNOSTICS BV.
XX
XX Loukachov VV, Van Gemen B, Goudsmit J;
XX
XX WPI; 2002-156696/21.
XX
XX Collection of binding groups for determining or typing samples,
XX especially clinical samples, has groups capable to identify essentially
XX all members of the family of nucleic acids of relatively high
XX significance.
XX
XX Disclosure; Page 24; 166pp; English.
XX
XX The present invention describes a collection of binding groups for a
XX family of nucleic acids comprising members of relative high and relative
XX low significance, where the binding groups are selected to be capable to
XX identify, alone or in combination, essentially all members of the family
XX of nucleic acids of relatively high significance. The collection of
XX binding groups is useful for typing of nucleic acid in a clinical sample,
XX by contacting the nucleic acid with the collection and determining
XX whether one or more binding groups bound to the nucleic acid of the
XX sample. This method is useful for determining whether the sample
XX comprises at least a part of a member of relatively high significance of
XX a family of nucleic acids. The collection of binding groups is useful for
XX diagnosing the severity of a disease caused by a pathogen containing a
XX member of a family of nucleic acids. ABL88779 to ABL89321 represent
XX oligonucleotide sequences used in the exemplification of the present
XX invention
XX
XX Sequence 19 BP; 10 A; 2 C; 2 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1505 CCATATTGCACTAAGGA 1523
DB 1 CCATATTGCCATAAGAA 19

RESULT 657
AAD36056/C
ID AAD36056 standard; DNA; 19 BP.
XX
XX AAD36056;
XX
XX 09-AUG-2002 (first entry)
XX
XX Rabbit skeletal muscle MLCK DNA amplifying downstream primer.
XX
XX Rabbit; cardiac myosin light chain kinase; cMLCK; tricuspid valve;
```

KW cardiac dysfunction; systolic dysfunction; mitral valve prolapse;
 KW diastolic dysfunction; cardiac hypertrophy; tricuspid insufficiency;
 KW coronary heart disease; myocardial infarction; mitral insufficiency;
 KW valvular heart disease; congestive heart failure; mitral valve;
 KW cardiomyopathy; cardiac; PCR; primer; ss.
 XX
 OS Oryctolagus cuniculus.
 XX
 XX WO200224889-A2.
 XX
 XX PD 28-MAR-2002.
 XX
 XX PF 12-SEP-2001; 2001WO-US028639.
 XX
 XX PR 12-SEP-2000; 2000US-0232246P.
 XX
 XX PR 13-SEP-2000; 2000US-0232456P.
 XX
 XX PA (USSH) US DEPT HEALTH & HUMAN SERVICES.
 XX
 XX PI Epstein ND, Haasanzadeh S, Winitzky S, Davis JS;
 XX
 XX DR WPI; 2002-394135/42.
 XX
 XX PT New isolated cardiac myosin light chain kinase (cMLCK) protein, useful
 XX for identifying cMLCK modulators that are used for treating cardiac
 XX dysfunction e.g. systolic or diastolic dysfunction, myocardial
 XX infarction.
 XX
 XX PS Disclosure; Page 28; 105pp; English.
 XX
 XX CC The invention relates to cDNA, protein sequence and genomic structure of
 XX the human cardiac isoform of myosin light chain kinase (cMLCK) and
 XX mutations in cMLCK gene that are associated with cardiac dysfunction. The
 XX invention also relates to methods for identifying agents that modulate
 XX cMLCK activity. cMLCK is useful for detecting enhanced susceptibility of
 XX a subject to cardiac dysfunction. cMLCK is useful for screening for an
 XX agent that modulates its biological activity. The method is useful for
 XX enhancing or preserving cardiac function in a subject having cardiac
 XX dysfunction, and harbouring a mutation in cMLCK allele. The method is
 XX useful for enhancing or preserving cardiac function in a subject having
 XX cardiac dysfunction such as systolic dysfunction, diastolic dysfunction,
 XX cardiac hypertrophy, cardiomyopathy, coronary heart disease, myocardial
 XX infarction, or congestive heart failure, or for preserving cardiac
 XX function, or cardiac dysfunction which comprises valvular heart disease
 XX such as mitral valve disease, tricuspid valve disease, mitral
 XX insufficiency, tricuspid insufficiency, or mitral valve prolapse. The
 XX method is useful for treating cardiac dysfunction, e.g., systolic or
 XX diastolic dysfunction, coronary heart disease, cardiac hypertrophy,
 XX cardiomyopathy, myocardial infarction, or congestive heart failure. The
 XX present sequence is a PCR primer used to amplify rabbit skeletal muscle
 XX cMLCK DNA
 XX
 XX SQ Sequence 19 BP; 3 A; 5 C; 7 G; 4 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 19;
 Best Local Similarity 84.2%; Pred. No. 6.9e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 Qy 969 GCTACACCGAGACCTCAAG 987
 Db 19 GCTGCACCTGGACCTCAAG 1
 RESULT 658
 ACC47620
 ID ACC47620 standard; DNA; 19 BP.
 XX
 XX AC ACC47620;
 XX
 XX DT 11-SEP-2003 (first entry)
 XX
 XX DE Mucor circinelloides carP PCR primer #62, SEQ ID NO:6.
 XX

KW Beta-carotene; biosynthesis; biosynthetic pathway; carotenoid;
 KW Blakeslea trispora; carP; bifunctional enzyme; lycopene cyclase;
 KW phytoene synthase; carB; phytoene dehydrogenase; PCR; primer; ss.
 XX
 OS Mucor circinelloides.
 XX
 XX PN WO2003027293-A1.
 XX
 XX PD 03-APR-2003.
 XX
 XX PF 26-SEP-2002; 2002WO-ES000452.
 XX
 XX PR 26-SEP-2001; 2001ES-00002161.
 XX
 XX PA (ANTI) ANTIBIOTICOS SAU.
 XX
 XX PI Rodriguez Saiz M, Marcos Rodriguez AT, Diez Garcia B;
 XX De La Fuente Moreno JL, Barredo Fuente JL;
 XX
 XX DR WPI; 2003-313642/30.
 XX
 XX PT New carP and carB genes from Blakeslea trispora, useful for increasing
 XX production of beta-carotene or other carotenoids, also related vectors
 XX and polypeptides.
 XX
 XX PS Example 2; Page 41; 50pp; Spanish.
 XX
 XX CC The invention relates to beta-carotene biosynthetic genes from the fungus
 XX Blakeslea trispora. The carP gene (ACC47617) encodes a bifunctional
 XX enzyme, lycopene cyclase/phytoene synthase (ABP97464), and the carB gene
 XX (ACC47618) encodes phytoene dehydrogenase (ABP97465). The invention also
 XX encompasses plasmids for the expression of additional copies these genes,
 XX and plasmids for the expression of heterologous genes under the control
 XX of the carP or the carB promoter. The carP and carB genes can be
 XX overexpressed to increase production of beta-carotene in B. trispora, or
 XX to modify the beta-carotene biosynthetic pathway to create B. trispora
 XX strains able to produce other carotenoids such as lycopene. The promoters
 XX of these genes may also be used to control expression of heterologous
 XX genes such as the Streptococcus hindustanus bleomycin resistance
 XX gene (bleR) in B. trispora. Sequences ACC47619-ACC47620 represent Mucor
 XX circinelloides carP PCR primers used to generate a probe used in the
 XX isolation of Blakeslea trispora DNA fragments containing both the carP
 XX and carB genes in an example from the invention
 XX
 XX SQ Sequence 19 BP; 4 A; 9 C; 4 G; 2 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 19;
 Best Local Similarity 84.2%; Pred. No. 6.9e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 Qy 1354 CACGCACCGCGCTTGATA 1372
 Db 1 CACGCACCGCGCTTGACA 19
 RESULT 659
 AAL53983
 ID AAL53983 standard; DNA; 19 BP.
 XX
 XX AC AAL53983;
 XX
 XX DT 18-FEB-2003 (first entry)
 XX
 XX DE Human serotonin 1B receptor gene PCR primer, SEQ ID No 7.
 XX
 XX KW Single nucleotide polymorphism; analgesic; variant allele; A-161T;
 XX human serotonin 1B receptor gene; addictive disease; neurologic;
 XX psychiatric condition; pain reliever; analgesia; PCR; primer; ss.
 XX
 XX OS Homo sapiens.
 XX
 XX PN US2002142312-A1.
 XX

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PD 03-OCT-2002.
XX
XX
XX 15-MAY-2001; 2001US-00855991.
XX
XX 15-MAY-2000; 2000US-0204169P.
XX
XX (CIGL//) CIGLER T.
XX (LAFO//) LAFORGE K S.
XX (KREE//) KREEK M J.
XX
XX Cigler T, Laforge KS, Kreek MJ;
XX WPI; 2003-102507/09.
XX
XX Novel isolated variant allele of human serotonin 1B receptor gene useful
XX for determining susceptibility to addictive, neurologic or psychiatric
XX conditions or diseases in a subject.
XX
XX Example; Page 12; 20pp; English.
XX
XX The invention relates to a novel isolated variant allele of the human
XX serotonin 1B receptor gene, comprising a DNA sequence having a variation
XX in a sequence of 1749 base pairs defined in the specification, where the
XX variation comprises A-161T. The human serotonin 1B receptor gene is
XX useful for determining a susceptibility in a subject to at least one
XX addictive disease, neurologic or psychiatric condition or disease. The
XX addictive disease comprises opioid addiction, cocaine addiction, or
XX addiction to other psychostimulants, nicotine addiction, barbiturate or
XX sedative hypnotic addiction, anxiolytic addiction, or alcohol addiction.
XX The neurologic or psychiatric condition or disease is anxiety,
XX depression, pathological aggression, or compulsive gambling. The human
XX serotonin 1B receptor gene is also useful for determining a therapeutic
XX amount of pain reliever to administer to the subject in order to induce
XX analgesia. This polynucleotide sequence represents a PCR primer of the
XX human serotonin 1B receptor gene of the invention
XX
XX Sequence 19 BP; 7 A; 2 C; 9 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 124 ATGGATCGGATGAGAGA 142
XX 1 ATGGAGCGGACGAGGAGA 19
XX
XX RESULT 660
XX ABT21583
XX ID ABT21583 standard; DNA; 19 BP.
XX AC ABT21583;
XX
XX 16-APR-2003 (first entry)
XX
XX Multiplex group PCR primer #330.
XX
XX Racing potential; horse; grandpaternal DNA; over-represented; breeding;
XX grandmother; performance; progeny horse; PCR; primer; ss.
XX
XX Unidentified.
XX
XX WO200292851-A2.
XX
XX 21-NOV-2002.
XX
XX 15-MAY-2002; 2002WO-GB002273.
XX
XX 15-MAY-2001; 2001GB-00011886.
XX (ANIM-) ANIMAL HEALTH TRUST.
XX (BRHO-) BRITISH HORSE RACING BOARD.
XX

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PI Binns MM, Swinburne JE;
XX
XX DR WPI; 2003-129314/12.
XX
XX Determining the racing potential of a horse comprises measuring whether
XX grandpaternal or grandmaternal DNA from the selected grandmother DNA is
XX over-represented in the genome of the horse.
XX
XX Example 2; Page 25; 49pp; English.
XX
XX The invention relates to a novel method for determining racing potential
XX of a horse. The method comprises measuring: whether grandpaternal DNA is
XX over-represented in the genome of the horse; or in the case where one of
XX the grandmothers was selected for breeding on the basis of racing
XX performance, whether grandmaternal DNA from the selected grandmother is
XX over-represented in the genome of the horse which indicates that the
XX horse has good racing potential. The method of the invention is useful
XX for determining the racing potential of a horse or for obtaining a
XX progeny horse with good racing potential. This polynucleotide sequence
XX represents a PCR primer used in the detection method of over-
XX representation of DNA from male grandparents of the invention
XX
XX Sequence 19 BP; 5 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 194 CCAATGGTCCCTCTGAGCA 212
XX 1 CCAATGGTCCCTCTGAGAA 19
XX
XX RESULT 661
XX ABX11035/C
XX ID ABX11035 standard; DNA; 19 BP.
XX AC ABX11035;
XX
XX 17-APR-2003 (first entry)
XX
XX Human IFNa2 specific PCR primer #2 used in quantitative PCR reaction.
XX
XX Human; keratinocyte derived interferon; XDI; immune system disorder;
XX inflammation; cancer; blood disorder; cardiovascular disorder;
XX cerebrovascular disease; wound; neurological disease; viral infection;
XX bacterial infection; blood vessel growth inhibition; immunomodulatory;
XX antiinflammatory; vasotropic; haemostatic; cardiac; vulnery;
XX cerebroprotective; nootropic; neuroprotective; antibacterial; virucide;
XX antiarteriosclerotic; cytostatic; quantitative PCR; QPCR; IFNa2; primer;
XX ss.
XX
XX Homo sapiens.
XX
XX US6472512-B1.
XX
XX 29-OCT-2002.
XX
XX 20-JUL-2001; 2001US-00908594.
XX
XX 21-JUL-1998; 98US-0093643P.
XX 21-JUL-1999; 99US-00358587.
XX 21-JUL-1999; 99WO-US016424.
XX 20-JAN-2000; 2000US-00487792.
XX 20-JAN-2000; 2000WO-US001239.
XX 21-JUL-2000; 2000US-0219621P.
XX 24-MAY-2001; 2001US-0292934P.
XX
XX (HUMA-) HUMAN GENOME SCI INC.
XX
XX Lafleur DW, Moore PA, Ruben SM;
XX
XX WPI; 2003-227870/22.
XX

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XX New isolated antibody that binds a keratinocyte derived interferon (KDI)
PT protein, for the diagnosis, prevention and treatment of disorders with
PT aberrant expression of the KDI protein, such as disorders of the immune
PT system.
XX
PS Example 5; Col 166; 147pp; English.
XX
CC The present invention relates to the isolation of human keratinocyte
CC derived interferon (KDI) protein, and the polynucleotide sequences
CC encoding it. The gene encoding human KDI maps to chromosome 9. The novel
CC KDI protein is a member of the interferon family. The invention also
CC describes vectors, host cells, and recombinant methods for producing the
CC KDI protein. The invention also discloses methods for identifying
CC agonists and antagonists of KDI activity. An antibody that binds to the
CC KDI protein, the KDI polypeptide sequence, and the polynucleotide
CC sequence encoding KDI are useful in the diagnosis, prevention and
CC treatment of disorders associated with the aberrant expression of the KDI
CC protein, such as disorders of the immune system, inflammation, cancer,
CC blood disorders, cardiovascular disorders, cerebrovascular diseases,
CC wounds, neurological diseases, bacterial or viral infections and blood
CC vessel growth inhibition. The present sequence represents a PCR primer
CC used in a quantitative PCR (QPCR) reaction in the examples of the present
CC invention
XX
SQ Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 6.9e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 926 TCACGCTGCTCGTGCGCT 944
DB 19 TCACGCTGCTGCTGCGCT 1

RESULT 662

ACF62640
ID ACF62640 standard; DNA; 19 BP.
XX
AC ACF62640;
XX
DT 08-OCT-2003 (first entry)
XX
DE Cancer based on CYP3A5 related oligonucleotide SEQ ID NO:469.
XX
KW Cancer; CYP3A5; irinotecan; pharmaceutical; malignant glioma;
KW cytochrome p450; subfamily IIIA; nifedipine oxidase; polypeptide 5;
KW cytostatic; PCR primer; ss.
XX
OS Synthetic.
XX
PN WO2003013534-A2.
XX
PD 20-FEB-2003.
XX
PF 23-JUL-2002; 2002WO-EP008219.
XX
PR 23-JUL-2001; 2001EP-00117608.
PR 24-MAY-2002; 2002EP-00011710.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Heinrich G, Kerb R;
XX
DR WPI; 2003-268144/26.
XX
PT New use of irinotecan for preparation of compositions for treating cancer
PT in subject having genome with variant allele comprising cytochrome p450,
PT subfamily IIIA, polypeptide 5 polynucleotide, termed CYP3A5.
XX
PS Disclosure; Page 44; 86pp; English.

CC The present invention describes the use of irinotecan (I) or its
CC derivative for the preparation of a pharmaceutical composition for
CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC cancer, or malignant glioma in a subject having a genome with a variant
CC allele which comprises a cytochrome p450, subfamily IIIA (nifedipine
CC oxidase), polypeptide 5 (CYP3A5) polynucleotide (II). (I) and (II) have
CC cytostatic activity. The therapeutic applications of (I) is improved,
CC since it is possible to individually treat a subject with an appropriate
CC dosage and/or an appropriate derivative of (I). Therefore, undesirable,
CC harmful or toxic effects are efficiently avoided. Unnecessary and
CC potentially harmful treatment of those subjects who do not respond to the
CC treatment with substances (nonresponders), as well as the development of
CC drug resistances due to suboptimal drug dosing can be avoided. ACF62200
CC to ACF62751 and ABX34912 to ABM35013 represent sequences used in the
CC exemplification of the present invention
XX

SQ Sequence 19 BP; 3 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 6.9e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 388 TCCTCGGATGAGTGCGACT 406
DB 1 TCCTCGGATGAGTGCGACT 19

RESULT 663

ACF62641/c
ID ACF62641 standard; DNA; 19 BP.
XX
AC ACF62641;
XX
DT 08-OCT-2003 (first entry)
XX
DE Cancer based on CYP3A5 related oligonucleotide SEQ ID NO:470.
XX
KW Cancer; CYP3A5; irinotecan; pharmaceutical; malignant glioma;
KW cytochrome p450; subfamily IIIA; nifedipine oxidase; polypeptide 5;
KW cytostatic; PCR primer; ss.
XX
OS Synthetic.
XX
PN WO2003013534-A2.
XX
PD 20-FEB-2003.
XX
PF 23-JUL-2002; 2002WO-EP008219.
XX
PR 23-JUL-2001; 2001EP-00117608.
PR 24-MAY-2002; 2002EP-00011710.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Heinrich G, Kerb R;
XX
DR WPI; 2003-268144/26.
XX
PT New use of irinotecan for preparation of compositions for treating cancer
PT in subject having genome with variant allele comprising cytochrome p450,
PT subfamily IIIA, polypeptide 5 polynucleotide, termed CYP3A5.
XX
PS Disclosure; Page 44; 86pp; English.
XX
CC The present invention describes the use of irinotecan (I) or its
CC derivative for the preparation of a pharmaceutical composition for
CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC cancer, or malignant glioma in a subject having a genome with a variant
CC allele which comprises a cytochrome p450, subfamily IIIA (nifedipine
CC oxidase), polypeptide 5 (CYP3A5) polynucleotide (II). (I) and (II) have
CC cytostatic activity. The therapeutic applications of (I) is improved,
CC since it is possible to individually treat a subject with an appropriate
CC dosage and/or an appropriate derivative of (I). Therefore, undesirable,
CC

CC harmful or toxic effects are efficiently avoided. Unnecessary and
 CC potentially harmful treatment of those subjects who do not respond to the
 CC treatment with substances (nonresponders), as well as the development of
 CC drug resistances due to suboptimal drug dosing can be avoided. ACF62200
 CC to ACF62751 and AEW34912 to AEW35013 represent sequences used in the
 CC exemplification of the present invention

XX SQ Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;

Best Local Similarity 84.2%; Pred. No. 6.9e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 388 TCCTCGGATGAGTGCAGT 406
 Db 19 TCCTCTGAGGATGTCAGT 1

RESULT 664

ADB21311
 ID ADB21311 standard; DNA; 19 BP.

XX AC ADB21311;

XX DT 20-NOV-2003 (first entry)

XX DE MRP1 based cancer related nucleic acid SEQ ID NO:459.

XX KW irinotecan; colorectal cancer; cervical cancer; gastric cancer;
 KW lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
 KW variant allele; multidrug resistance protein 1; MRP1; cytosolic; gene;
 KW ds.

XX OS Unidentified.

XX FN WO2003013533-A2.

XX PD 20-FEB-2003.

XX PF 23-JUL-2002; 2002WO-EP008200.

XX PR 23-JUL-2001; 2001EP-00117608.

XX PR 24-MAY-2002; 2002EP-00011710.

XX PA (EPID-) EPIDAUS BIOTECHNOLOGIE AG.

XX PI Heinrich G, Kerb R;

XX DR WPI; 2003-354397/33.

XX PT Use of irinotecan or its derivative for preparation of a pharmaceutical
 PT composition for treating cancer in a subject having a genome with a
 PT variant allele comprising a multidrug resistance protein 1
 PT polynucleotide.

XX PS Disclosure; Page 54; 100pp; English.

XX CC The present invention describes a method for the use of irinotecan (I) or
 CC its derivative for the preparation of a pharmaceutical composition for
 CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic
 CC cancer, or malignant glioma in a subject having a genome with a variant
 CC allele which comprises a multidrug resistance protein 1 (MRP1)
 CC polynucleotide (II). (I) has cytostatic activity. (I) or its derivative
 CC can be used for the preparation of a pharmaceutical composition for
 CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic
 CC cancer, or malignant glioma in a subject, where the subject is a human
 CC (preferably African or Asian) or a mouse. The present sequence represents
 CC a sequence which is used in the exemplification of the present invention.

XX SQ Sequence 19 BP; 3 A; 6 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;

Best Local Similarity 84.2%; Pred. No. 6.9e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 388 TCCTCGGATGAGTGCAGT 406

Db 1 TCCTCTGAGGATGTCAGT 19

RESULT 665

ADB21312/c

ID ADB21312 standard; DNA; 19 BP.

XX AC ADB21312;

XX DT 20-NOV-2003 (first entry)

XX DE MRP1 based cancer related nucleic acid SEQ ID NO:470.

XX KW irinotecan; colorectal cancer; cervical cancer; gastric cancer;
 KW lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
 KW variant allele; multidrug resistance protein 1; MRP1; cytosolic; gene;
 KW ds.

XX OS Unidentified.

XX FN WO2003013533-A2.

XX PD 20-FEB-2003.

XX PF 23-JUL-2002; 2002WO-EP008200.

XX PR 23-JUL-2001; 2001EP-00117608.

XX PR 24-MAY-2002; 2002EP-00011710.

XX PA (EPID-) EPIDAUS BIOTECHNOLOGIE AG.

XX PI Heinrich G, Kerb R;

XX DR WPI; 2003-354397/33.

XX PT Use of irinotecan or its derivative for preparation of a pharmaceutical
 PT composition for treating cancer in a subject having a genome with a
 PT variant allele comprising a multidrug resistance protein 1
 PT polynucleotide.

XX PS Disclosure; Page 54; 100pp; English.

XX CC The present invention describes a method for the use of irinotecan (I) or
 CC its derivative for the preparation of a pharmaceutical composition for
 CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic
 CC cancer, or malignant glioma in a subject having a genome with a variant
 CC allele which comprises a multidrug resistance protein 1 (MRP1)
 CC polynucleotide (II). (I) has cytostatic activity. (I) or its derivative
 CC can be used for the preparation of a pharmaceutical composition for
 CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic
 CC cancer, or malignant glioma in a subject, where the subject is a human
 CC (preferably African or Asian) or a mouse. The present sequence represents
 CC a sequence which is used in the exemplification of the present invention.

XX SQ Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;

Best Local Similarity 84.2%; Pred. No. 6.9e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 388 TCCTCGGATGAGTGCAGT 406

Db 19 TCCTCTGAGGATGTCAGT 1

RESULT 666

ACF39450/c

ID ACF39450 standard; DNA; 19 BP.

XX

```
AC ACF39450;
XX
XX 26-SEP-2003 (first entry)
XX
XX Acute lymphoblastic leukaemia assay related primer #12.
XX
XX Simultaneous detection; multiple target nucleic acid molecule;
XX biological sample; Exonuclease I; PCR; human papillomavirus; HPV;
XX BARCODE-MT; acute lymphoblastic leukaemia; cancer; assay;
XX bead array coded detection of multiple target; microarray;
XX targeted genetic risk-stratification; primer; probe; ss.
XX
XX Synthetic.
XX
XX WO2003054149-A2.
XX
XX 03-JUL-2003.
XX
XX 06-DEC-2002; 2002WO-US039223.
XX
XX 07-DEC-2001; 2001US-0338442P.
XX
XX 05-NOV-2002; 2002US-0423793P.
XX
XX (UTMA-) UNIV MASSACHUSETTS.
XX
XX Pihan G;
XX
XX WPI; 2003-559133/52.
XX
XX Simultaneously detecting the presence of multiple target nucleic acid
XX molecules in a biological sample for optimizing risk-adapted therapy for
XX Exonuclease I.
XX
XX Example 1; Fig 6; 41pp; English.
XX
XX The present invention describes a method for simultaneously detecting the
XX presence of multiple target nucleic acid molecules in a biological sample
XX comprising: (a) isolating and enriching target nucleic acid molecules
XX from the biological sample; (b) treating the enriched target nucleic acid
XX molecules with Exonuclease I; (c) performing linear PCR on the
XX Exonuclease I treated enriched target nucleic acid molecule to produce
XX linear PCR product where only a single primer is used; (d) obtaining
XX beads coupled to an oligonucleotide molecule complementary to the
XX amplified target nucleic acid molecules; (e) forming a mixture by mixing
XX the beads and the enriched linear PCR product nucleic acid; (f) forming a
XX reacted sample by incubating the mixture under conditions where if the
XX enriched linear PCR product includes the target nucleic acid molecule,
XX the enriched linear PCR product will hybridise to the oligonucleotide
XX molecule; (g) analysing the reacted sample by determining the
XX fluorescence of each bead analysed; and (h) detecting a level of
XX fluorescence on the beads, where the level of fluorescence corresponds to
XX a level of a target nucleic acid molecule in the biological sample. The
XX method for simultaneously detecting the presence of multiple target
XX nucleic acid molecules in a biological sample or for optimising risk-
XX adapted therapy for a disorder associated with the target nucleic acid.
XX ACF39439 to ACF39597 represent primers and probes used in the
XX exemplification of the present invention.
XX
XX Sequence 19 BP; 4 A; 2 C; 10 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1674 AGCCCCCACTACATCTTC 1692
XX |||||
XX Db 19 AGCCCCCACTACATCTTC 1
XX
XX RESULT 667
XX ACH03516
XX ID ACH03516 standard; DNA; 19 BP.
XX
XX ACH03516;
XX
XX 25-SEP-2003 (first entry)
XX
XX Human latrophilin 3 (LPH3) associated primer #58.
XX
XX Human; latrophilin 3; LPH3; ophthalmological; hypotensive; gene therapy;
XX eye disease; primary open-angle glaucoma; ocular hypertension;
XX elevated intraocular pressure; PCR; primer; ss.
XX
XX Homo sapiens.
XX
XX US2003054347-A1.
XX
XX 20-MAR-2003.
XX
XX 27-APR-2001; 2001US-00844653.
XX
XX 27-APR-2001; 2001US-00844653.
XX (UNMI ) UNIV MICHIGAN.
XX
XX Richards JE, Rozsa FW;
XX
XX WPI; 2003-521847/49.
XX
XX New Latrophilin (LPH) polynucleotides and polypeptides, useful for
XX diagnosing or treating subjects at risk for or having eye disease, e.g.
XX Primary Open-Angle Glaucoma, ocular hypertension, or elevated intraocular
XX pressure.
XX
XX Example 1; Page 32; 153pp; English.
XX
XX The invention describes a new composition, which comprises an isolated
XX Latrophilin (LPH) nucleic acid. The compositions are useful for
XX diagnosing or treating subjects at risk for or having eye disease, e.g.
XX Primary Open-Angle Glaucoma (e.g. juvenile onset or adult onset), ocular
XX hypertension, or elevated intraocular pressure. This sequence represents
XX a primer associated with isolation of human latrophilin 3 (LPH3)
XX
XX Sequence 19 BP; 4 A; 8 C; 1 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1446 GAAACATCCATCTTCCTC 1464
XX |||||
XX Db 1 GATCCATCCATCTTCCTC 19
XX
XX RESULT 668
XX ADB88401/C
XX ID ADB88401 standard; DNA; 19 BP.
XX
XX ADB88401;
XX
XX 04-DEC-2003 (first entry)
XX
XX Human UGT1A1 variant allele sequence fragment SEQ ID NO:442.
XX
XX ss; irinotecan; cancer; UGT1A1; cytostatic; topoisomerase I inhibitor;
XX colorectal cancer; cervical cancer; gastric cancer; lung cancer;
XX ovarian cancer; pancreatic cancer; malignant glioma;
XX uridine diphosphate glycosyltransferase1 member A1.
XX
XX Homo sapiens.
XX
XX WO2003013536-A2.
XX
XX 20-FEB-2003.
XX
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PF 23-JUL-2002; 2002WO-EP008217.
XX
XX
PR 23-JUL-2001; 2001EP-00117608.
PR 24-MAY-2002; 2002EP-00011710.
XX
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
XX
PI Heinrich G, Kerb R;
XX
XX
DR WPI; 2003-289896/28.
XX
XX
PT Use of irinotecan to treat cancer patient by determining if patient has
PT variant alleles of UGT1A1 gene, administering increased/decreased amounts
PT of irinotecan based on increased/decreased levels of UGT1A1 gene product.
XX
XX
PS Disclosure; Page 58; 107pp; English.
XX
XX
CC The invention relates to the novel use of irinotecan to treat a patient
CC suffering from cancer. This involves determining if the patient has one
CC or more variant alleles of the UGT1A1 gene, and if the patient has one
CC or more variant alleles, irinotecan is administered in an increased
CC or decreased amount in comparison to the amount that is administered
CC without regard to the patient's alleles in the UGT1A1 gene. The invention
CC has cytostatic activity. A composition of the invention acts as a
CC topoisomerase I inhibitor. The method is useful for treating a patient,
CC an animal e.g. mouse or a human, preferably African or Asian, suffering
CC from cancer such as colorectal, cervical, gastric cancer, lung, ovarian,
CC pancreatic cancer or malignant glioma. The present sequence is used in
CC the exemplification of the invention.
XX
XX
SQ Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 6.9e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 388 TCCTCGGATGAGTGCGAGT 406
DB 1 TCCTCTGAGGATGTCAGT 19
RESULT 670
ADB97384/C
ID ADB97384 standard; DNA; 19 BP.
XX
XX
AC ADB97384;
XX
XX
DT 04-DEC-2003 (first entry)
XX
XX
DE Human MDR1 variant allele sequence fragment SEQ ID NO:470.
XX
XX
KW irinotecan; colorectal cancer; cervical cancer; gastric cancer;
KW lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW multidrug resistance 1; MDR1; cytostatic; human; ds; Cyp3A5; MRP1; MDR1;
XX TOP1.
XX
XX
OS Homo sapiens.
XX
XX
PN WO2003013537-A2.
XX
XX
PD 20-FEB-2003.
XX
XX
PF 23-JUL-2002; 2002WO-EP008218.
XX
XX
PR 23-JUL-2001; 2001EP-00117608.
PR 24-MAY-2002; 2002EP-00011710.
XX
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
XX
PI Heinrich G, Kerb R;
XX
XX
DR WPI; 2003-268145/26.
XX
XX
PT New use of irinotecan for preparation of pharmaceutical compositions for
PT treating cancer in subject having genome with variant allele comprising
PT multidrug resistance 1 polynucleotide.
XX
XX
PS Claim 1; Page 82; 130pp; English.
XX
XX
CC The invention relates to the novel use of irinotecan or its derivative
CC for the preparation of pharmaceutical compositions for treating
CC colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or
CC malignant glioma in a subject having a genome with a variant allele which
CC comprises a multidrug resistance 1 (MDR1) polynucleotide. A composition

PF 23-JUL-2002; 2002WO-EP008217.
XX
XX
PR 23-JUL-2001; 2001EP-00117608.
PR 24-MAY-2002; 2002EP-00011710.
XX
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
XX
PI Heinrich G, Kerb R;
XX
XX
DR WPI; 2003-289896/28.
XX
XX
PT Use of irinotecan to treat cancer patient by determining if patient has
PT variant alleles of UGT1A1 gene, administering increased/decreased amounts
PT of irinotecan based on increased/decreased levels of UGT1A1 gene product.
XX
XX
PS Disclosure; Page 58; 107pp; English.
XX
XX
CC The invention relates to the novel use of irinotecan to treat a patient
CC suffering from cancer. This involves determining if the patient has one
CC or more variant alleles of the UGT1A1 gene, and if the patient has one
CC or more variant alleles, irinotecan is administered in an increased
CC or decreased amount in comparison to the amount that is administered
CC without regard to the patient's alleles in the UGT1A1 gene. The invention
CC has cytostatic activity. A composition of the invention acts as a
CC topoisomerase I inhibitor. The method is useful for treating a patient,
CC an animal e.g. mouse or a human, preferably African or Asian, suffering
CC from cancer such as colorectal, cervical, gastric cancer, lung, ovarian,
CC pancreatic cancer or malignant glioma. The present sequence is used in
CC the exemplification of the invention.
XX
XX
SQ Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 6.9e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 388 TCCTCGGATGAGTGCGAGT 406
DB 19 TCCTCTGAGGATGTCAGT 1
RESULT 669
ADB88400
ID ADB88400 standard; DNA; 19 BP.
XX
XX
AC ADB88400;
XX
XX
DT 04-DEC-2003 (first entry)
XX
XX
DE Human UGT1A1 variant allele sequence fragment SEQ ID NO:441.
XX
XX
KW ss; irinotecan; cancer; UGT1A1; cytostatic; topoisomerase I inhibitor;
KW colorectal cancer; cervical cancer; gastric cancer; lung cancer;
KW ovarian cancer; pancreatic cancer; malignant glioma;
KW uridine diphosphate glycosyltransferase1 member A1.
XX
XX
OS Homo sapiens.
XX
XX
PN WO2003013536-A2.
XX
XX
PD 20-FEB-2003.
XX
XX
PF 23-JUL-2002; 2002WO-EP008217.
XX
XX
PR 23-JUL-2001; 2001EP-00117608.
PR 24-MAY-2002; 2002EP-00011710.
XX
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
XX
PI Heinrich G, Kerb R;
XX
XX
DR WPI; 2003-289896/28.
XX

CC of the invention has cytostatic activity. The invention is useful for the
CC preparation of pharmaceutical compositions for treating colorectal,
CC cervical, gastric, lung, ovarian or pancreatic cancer, or malignant
CC glioma in a subject (preferably human, more preferably African or Asian)
CC or a mouse. The present sequence is used in the exemplification of the
CC invention.

XX
SQ Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 6.9e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 388 TCCTCGGATGAGGTGCAGT 406
|||||
DB 19 TCCTCTGAGGATGTGCAGT 1

RESULT 671
ADB97383
ID ADB97383 standard; DNA; 19 BP.
XX AC ADB97383;
XX AC ADB97383;
DT 04-DEC-2003 (first entry)
XX DE Human MDR1 variant allele sequence fragment SEQ ID NO:469.
XX KW irinotecan; colorectal cancer; cervical cancer; gastric cancer;
KW lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW multidrug resistance 1; MDR1; cytostatic; human; ds; Cyp3A5; MRP1; MDR1;
KW TOPI.

XX OS Homo sapiens.
XX PI Heinrich G, Korb R;
XX PN WO2003013537-A2.
XX PD 20-FEB-2003.
XX PF 23-JUL-2002; 2002WO-EP008218.
XX PR 23-JUL-2001; 2001EP-00117608.
XX PR 24-MAY-2002; 2002EP-00011710.

XX PA (EPID-) EPIDAURUS BIOTECHNOLOGIE AG.
XX PI Heinrich G, Korb R;
XX PN WPI; 2003-268145/26.
XX PT New use of irinotecan for preparation of pharmaceutical compositions for
PT treating cancer in subject having genome with variant allele comprising
PT multidrug resistance 1 polynucleotide.

XX PS Claim 1; Page 82; 130pp; English.
XX CC The invention relates to the novel use of irinotecan or its derivative
CC for the preparation of pharmaceutical compositions for treating
CC colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or
CC malignant glioma in a subject having a genome with a variant allele which
CC comprises a multidrug resistance 1 (MDR1) polynucleotide. A composition
CC of the invention has cytostatic activity. The invention is useful for the
CC preparation of pharmaceutical compositions for treating colorectal,
CC cervical, gastric, lung, ovarian or pancreatic cancer, or malignant
CC glioma in a subject (preferably human, more preferably African or Asian)
CC or a mouse. The present sequence is used in the exemplification of the
CC invention.

XX SQ Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 6.9e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 388 TCCTCGGATGAGGTGCAGT 406
|||||
DB 1 TCCTCTGAGGATGTGCAGT 19
RESULT 672
ADB92575/c
ID ADB92575 standard; DNA; 19 BP.
XX AC ADB92575;
XX AC ADB92575;
DT 04-DEC-2003 (first entry)
XX DE Human MDR1 variant allele sequence fragment SEQ ID NO:470.
XX KW irinotecan; colorectal cancer; cervical cancer; gastric cancer;
KW lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW multidrug resistance 1; MDR1; cytostatic; ds; human; UGT1A1; MRP1; TOPI.

XX OS Homo sapiens.
XX PN WO2003013535-A2.
XX PD 20-FEB-2003.
XX PF 23-JUL-2002; 2002WO-EP008220.
XX PR 23-JUL-2001; 2001EP-00117608.
XX PR 24-MAY-2002; 2002EP-00011710.
XX PA (EPID-) EPIDAURUS BIOTECHNOLOGIE AG.
XX PI Heinrich G, Korb R;
XX PN WPI; 2003-342400/32.
XX PT New use of irinotecan for preparation of pharmaceutical compositions for
PT treating cancer in subject having genome with variant allele comprising
PT multidrug resistance 1 polynucleotide.
XX PS Claim 8; Page 54; 104pp; English.

XX CC The invention relates to a novel use of irinotecan or its derivative for
CC the preparation of a pharmaceutical composition for treating colorectal,
CC cervical, gastric, lung, ovarian or pancreatic cancer, or malignant
CC glioma in a subject having a genome with a variant allele which comprises
CC a multidrug resistance 1 (MDR1) polynucleotide. A composition of the
CC invention has cytostatic activity. The present sequence is used in the
CC exemplification of the invention.

XX SQ Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 6.9e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 388 TCCTCGGATGAGGTGCAGT 406
|||||
DB 19 TCCTCTGAGGATGTGCAGT 1

RESULT 673
ADB92574
ID ADB92574 standard; DNA; 19 BP.
XX AC ADB92574;
XX AC ADB92574;
DT 04-DEC-2003 (first entry)
XX DE Human MDR1 variant allele sequence fragment SEQ ID NO:469.
XX KW irinotecan; colorectal cancer; cervical cancer; gastric cancer;

KW lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW multidrug resistance 1; MDR1; cytosolic; ds; human; UGT1A1; MRP1; TOP1.
XX
OS Homo sapiens.
XX WO2003013535-A2.
XX
PD 20-FEB-2003.
XX
XX 23-JUL-2002; 2002WO-EP008220.
XX
XX 23-JUL-2001; 2001EP-00117608.
PR 24-MAY-2002; 2002EP-00011710.
XX
XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
XX Heinrich G, Korb R;
XX
XX WPI; 2003-342400/32.
DR
XX
XX New use of irinotecan for preparation of pharmaceutical compositions for
PT treating cancer in subject having genome with variant allele comprising
PT multidrug resistance 1 polynucleotide.
XX
XX Claim 8; Page 54; 104pp; English.
XX
XX The invention relates to a novel use of irinotecan or its derivative for
CC the preparation of a pharmaceutical composition for treating colorectal,
CC cervical, gastric, lung, ovarian or pancreatic cancer, or malignant
CC glioma in a subject having a genome with a variant allele which comprises
CC a multidrug resistance 1 (MDR1) polynucleotide. A composition of the
CC invention has cytostatic activity. The present sequence is used in the
CC exemplification of the invention.
XX
SQ Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 6.9e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 388 TCCTCGGATGAGTGCGAGT 406
Db 1 TCCTCTGAGGATGTCAGT 19

RESULT 674
ADE29746
ID ADE29746 standard; RNA; 19 BP.
XX
XX ADE29746;
XX
XX 29-JAN-2004 (first entry)
XX
XX Mitogen activated protein kinase siRNA oligonucleotide SEQ ID NO:368.
XX
XX short interfering nucleic acid; siRNA; downregulation; inhibition;
KW mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;
KW cytosolic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;
KW immunosuppressive; antibacterial; antirheumatic; antiarthritic;
KW antipruritic; gastrointestinal; obesity; diabetes; tumour;
KW inflammatory disease; asthma; septic shock; rheumatoid arthritis;
KW psoriasis; inflammatory bowel disease; drug screening;
KW genetic engineering; pharmacogenomic; gene mapping; ss.
XX
XX Synthetic.
XX WO2003072590-A1.
XX
XX 04-SEP-2003.
XX
XX 28-JAN-2003; 2003WO-US002510.
XX
XX 20-FEB-2002; 2002US-0358580P.
PR

PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX
XX (SIRN-) SIRNA THERAPEUTICS INC.
XX
XX McSwiggen J, Beigelman L, Uzman N, Haerberli P, Chowrira B;
PI
XX WPI; 2003-689980/65.
DR
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of cancer, downregulates expression of mitogen-activated
PT protein kinase genes.
XX
XX
XX Example 3; SEQ ID NO 368; 164pp; English.
XX
XX The present invention describes a short interfering nucleic acid (siRNA)
CC that downregulates expression of a mitogen-activated protein kinase
CC (MAPK) genes by RNA interference. Also described: (1) a method for
CC modulating expression of MAPK genes in cells, tissue explants or
CC organisms by introduction of siRNA; (2) kits for in vitro or in vivo
CC delivery of siRNA; (3) conjugates and/or complexes of siRNA; and (4)
CC vectors that express siRNA and cells containing these vectors. MAPK siRNAs
CC have cytostatic, anorectic, antidiabetic, antiinflammatory,
CC antiasthmatic, immunosuppressive, antibacterial, antirheumatic,
CC antiarthritic, antipruritic and gastrointestinal activities. The MAPK
CC siRNAs can be used to modulate the expression of MAPK genes, in cells,
CC tissue explants or organisms, e.g. for treating obesity; diabetes types I
CC and II; a wide range of tumours, and inflammatory diseases (asthma,
CC septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel
CC disease). They can also be used for drug screening; diagnosis; target
CC identification and validation; genetic engineering; pharmacogenomics;
CC studying gene function and gene mapping (e.g. of single-nucleotide
CC polymorphisms). The present sequence represents a MAPK siRNA which is used
CC in the exemplification of the present invention.
XX
XX Sequence 19 BP; 2 A; 4 C; 7 G; 0 T; 6 U; 0 Other;
SQ

Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 57.9%; Pred. No. 6.9e+02;
Matches 11; Conservative 5; Mismatches 3; Indels 0; Gaps 0;

Qy 1156 ATGTGGGGTGTGGGCTGCA 1174
Db 1 AUCUGGUCUGGGGCGCA 19

RESULT 675
ADE29851/c
ID ADE29851 standard; RNA; 19 BP.
XX
XX ADE29851;
XX
XX 29-JAN-2004 (first entry)
XX
XX Mitogen activated protein kinase siRNA oligonucleotide SEQ ID NO:473.
XX
XX short interfering nucleic acid; siRNA; downregulation; inhibition;
KW mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;
KW cytosolic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;
KW immunosuppressive; antibacterial; antirheumatic; antiarthritic;
KW antipruritic; gastrointestinal; obesity; diabetes; tumour;
KW inflammatory disease; asthma; septic shock; rheumatoid arthritis;
KW psoriasis; inflammatory bowel disease; drug screening;
KW genetic engineering; pharmacogenomic; gene mapping; ss.
XX
XX Synthetic.
XX OS
XX WO2003072590-A1.
XX
XX 04-SEP-2003.
XX
XX 28-JAN-2003; 2003WO-US002510.
XX
XX 20-FEB-2002; 2002US-0358580P.
PR

PD 04-SEP-2003.
XX 28-JAN-2003; 2003WO-US002510.
XX 20-FEB-2002; 2002US-0358580P.
XX 11-MAR-2002; 2002US-0363124P.
XX 06-JUN-2002; 2002US-0386782P.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 15-JAN-2003; 2003US-0440129P.
XX (SIRN-) SIRNA THERAPEUTICS INC.
XX Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;
XX WPI; 2003-689980/65.
XX New short interfering nucleic acid, useful e.g. for treatment and
XX diagnosis of cancer, downregulates expression of mitogen-activated
XX protein kinase genes.
XX Example 3; SEQ ID NO 473; 164pp; English.
XX The present invention describes a short interfering nucleic acid (siNA)
XX that downregulates expression of a mitogen-activated protein kinase
XX (MAPK) genes by RNA interference. Also described: (1) a method for
XX modulating expression of MAPK genes in cells, tissue explants or
XX organisms by introduction of siNA; (2) kits for in vitro or in vivo
XX delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)
XX vectors that express siNA and cells containing these vectors. MAPK siNAs
XX have cytostatic, anorectic, antidiabetic, antiinflammatory,
XX antiasthmatic, immunosuppressive, antibacterial, antirheumatic,
XX antiarthritic, antipsoriatic and gastrointestinal activities. The MAPK
XX siNAs can be used to modulate the expression of MAPK genes, in cells,
XX tissue explants or organisms, e.g. for treating obesity; diabetes types I
XX and II; a wide range of tumors, and inflammatory diseases (asthma,
XX septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel
XX disease). They can also be used for drug screening; diagnosis; target
XX identification and validation; genetic engineering; pharmacogenomics;
XX studying gene function and gene mapping (e.g. of single-nucleotide
XX polymorphisms). The present sequence represents a MAPK siNA which is used
XX in the exemplification of the present invention.
XX Sequence 19 BP; 6 A; 7 C; 4 G; 0 T; 2 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 1156 ATGTGGGGTGTGGCTGCA 1174
DB 19 ATCTGCTCTGTGGCTGCA 1
RESULT 676
ADE29841/c
ID ADE29841 standard; RNA; 19 BP.
XX ADE29841;
XX AC
XX AC
XX 29-JAN-2004 (first entry)
XX DE
XX Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:463.
XX short interfering nucleic acid; siNA; downregulation; inhibition;
XX mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;
XX cytosstatic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;
XX immunosuppressive; antibacterial; antirheumatic; antiarthritic;
XX antipsoriatic; gastrointestinal; obesity; diabetes; tumour;
XX inflammatory disease; asthma; septic shock; rheumatoid arthritis;
XX psoriasis; inflammatory bowel disease; drug screening;
XX genetic engineering; pharmacogenomic; gene mapping; ss.

XX Synthetic.
XX WO2003072590-A1.
XX 04-SEP-2003.
XX 28-JAN-2003; 2003WO-US002510.
XX 20-FEB-2002; 2002US-0358580P.
XX 11-MAR-2002; 2002US-0363124P.
XX 06-JUN-2002; 2002US-0386782P.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 15-JAN-2003; 2003US-0440129P.
XX (SIRN-) SIRNA THERAPEUTICS INC.
XX Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;
XX WPI; 2003-689980/65.
XX New short interfering nucleic acid, useful e.g. for treatment and
XX diagnosis of cancer, downregulates expression of mitogen-activated
XX protein kinase genes.
XX Example 3; SEQ ID NO 463; 164pp; English.
XX The present invention describes a short interfering nucleic acid (siNA)
XX that downregulates expression of a mitogen-activated protein kinase
XX (MAPK) genes by RNA interference. Also described: (1) a method for
XX modulating expression of MAPK genes in cells, tissue explants or
XX organisms by introduction of siNA; (2) kits for in vitro or in vivo
XX delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)
XX vectors that express siNA and cells containing these vectors. MAPK siNAs
XX have cytostatic, anorectic, antidiabetic, antiinflammatory,
XX antiasthmatic, immunosuppressive, antibacterial, antirheumatic,
XX antiarthritic, antipsoriatic and gastrointestinal activities. The MAPK
XX siNAs can be used to modulate the expression of MAPK genes, in cells,
XX tissue explants or organisms, e.g. for treating obesity; diabetes types I
XX and II; a wide range of tumors, and inflammatory diseases (asthma,
XX septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel
XX disease). They can also be used for drug screening; diagnosis; target
XX identification and validation; genetic engineering; pharmacogenomics;
XX studying gene function and gene mapping (e.g. of single-nucleotide
XX polymorphisms). The present sequence represents a MAPK siNA which is used
XX in the exemplification of the present invention.
XX Sequence 19 BP; 3 A; 2 C; 9 G; 0 T; 5 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 985 AAGCCCCAGAACCTGCTCA 1003
DB 19 AAGCCCCCAACCTGCTCA 1
RESULT 677
ADE29736
ID ADE29736 standard; RNA; 19 BP.
XX ADE29736;
XX AC
XX 29-JAN-2004 (first entry)
XX DE
XX Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:358.
XX short interfering nucleic acid; siNA; downregulation; inhibition;
XX mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;
XX cytosstatic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;

KW immunosuppressive; antibacterial; antirheumatic; antiarthritic;
 KW antipsoriatic; gastrointestinal; obesity; diabetes; tumour;
 KW inflammatory disease; asthma; septic shock; rheumatoid arthritis;
 KW psoriasis; inflammatory bowel disease; drug screening;
 KW genetic engineering; pharmacogenomic; gene mapping; ss.
 XX Synthetic.
 XX OS
 XX WO2003072590-A1.
 XX PD 04-SEP-2003.
 XX XX
 XX 28-JAN-2003; 2003WO-US002510.
 XX XX
 XX 20-FEB-2002; 2002US-0358580P.
 XX 11-MAR-2002; 2002US-0363124P.
 XX 06-JUN-2002; 2002US-0386782P.
 XX 29-AUG-2002; 2002US-0406784P.
 XX 05-SEP-2002; 2002US-0408378P.
 XX 09-SEP-2002; 2002US-0409293P.
 XX 15-JAN-2003; 2003US-0440129P.
 XX (SIRN-) SIRNA THERAPEUTICS INC.
 XX PA
 XX Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;
 XX WPI; 2003-689980/65.
 XX DR
 XX New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of cancer, downregulates expression of mitogen-activated
 PT protein kinase genes.
 XX XX
 XX Example 3; SEQ ID NO 358; 164pp; English.
 XX PS
 XX The present invention describes a short interfering nucleic acid (siNA)
 CC that downregulates expression of a mitogen-activated protein kinase
 CC (MAPK) genes by RNA interference. Also described: (1) a method for
 CC modulating expression of MAPK genes in cells, tissue explants or
 CC organisms by introduction of siNA; (2) kits for in vitro or in vivo
 CC delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)
 CC vectors that express siNA and cells containing these vectors. MAPK siNAs
 CC antiarthritic, antipsoriatic and gastrointestinal activities. The MAPK
 CC siNAs can be used to modulate the expression of MAPK genes, in cells,
 CC tissue explants or organisms, e.g. for treating obesity; diabetes types I
 CC and II; a wide range of tumours, and inflammatory diseases (asthma,
 CC septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel
 CC disease). They can also be used for drug screening; diagnosis; target
 CC identification and validation; genetic engineering; pharmacogenomics;
 CC studying gene function and gene mapping (e.g. of single-nucleotide
 CC polymorphisms). The present sequence represents a MAPK siNA which is used
 CC in the exemplification of the present invention.
 XX XX
 XX SQ Sequence 19 BP; 5 A; 9 C; 2 G; 0 T; 3 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 19;
 Best Local Similarity 73.7%; Pred. No. 6.9e+02;
 Matches 14; Conservative 2; Mismatches 3; Indels 0; Gaps 0;
 Qy 985 AGCCCGAGAACTGCTCA 1003
 Db 1 AAGCCCGAGAACTGCTCA 19
 ||||| ||||| ||||| |||||
 ||||| ||||| ||||| |||||
 RESULT 678
 ADE29735
 ID ADE29735 standard; RNA; 19 BP.
 XX AC
 XX ADE29735;
 XX AC
 XX DT 29-JAN-2004 (first entry)
 XX ID

DE Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:357.
 XX short interfering nucleic acid; siNA; downregulation; inhibition;
 KW mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;
 KW cytosolic; anorectic; antidiabetic; antinflammatory; antiasthmatic;
 KW immunosuppressive; antibacterial; antirheumatic; antiarthritic;
 KW antipsoriatic; gastrointestinal; obesity; diabetes; tumour;
 KW inflammatory disease; asthma; septic shock; rheumatoid arthritis;
 KW psoriasis; inflammatory bowel disease; drug screening;
 KW genetic engineering; pharmacogenomic; gene mapping; ss.
 XX Synthetic.
 XX OS
 XX WO2003072590-A1.
 XX PD 04-SEP-2003.
 XX XX
 XX 28-JAN-2003; 2003WO-US002510.
 XX XX
 XX 20-FEB-2002; 2002US-0358580P.
 XX 11-MAR-2002; 2002US-0363124P.
 XX 06-JUN-2002; 2002US-0386782P.
 XX 29-AUG-2002; 2002US-0406784P.
 XX 05-SEP-2002; 2002US-0408378P.
 XX 09-SEP-2002; 2002US-0409293P.
 XX 15-JAN-2003; 2003US-0440129P.
 XX (SIRN-) SIRNA THERAPEUTICS INC.
 XX PA
 XX Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;
 XX WPI; 2003-689980/65.
 XX DR
 XX New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of cancer, downregulates expression of mitogen-activated
 PT protein kinase genes.
 XX XX
 XX Example 3; SEQ ID NO 357; 164pp; English.
 XX PS
 XX The present invention describes a short interfering nucleic acid (siNA)
 CC that downregulates expression of a mitogen-activated protein kinase
 CC (MAPK) genes by RNA interference. Also described: (1) a method for
 CC modulating expression of MAPK genes in cells, tissue explants or
 CC organisms by introduction of siNA; (2) kits for in vitro or in vivo
 CC delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)
 CC vectors that express siNA and cells containing these vectors. MAPK siNAs
 CC antiarthritic, antipsoriatic and gastrointestinal activities. The MAPK
 CC siNAs can be used to modulate the expression of MAPK genes, in cells,
 CC tissue explants or organisms, e.g. for treating obesity; diabetes types I
 CC and II; a wide range of tumours, and inflammatory diseases (asthma,
 CC septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel
 CC disease). They can also be used for drug screening; diagnosis; target
 CC identification and validation; genetic engineering; pharmacogenomics;
 CC studying gene function and gene mapping (e.g. of single-nucleotide
 CC polymorphisms). The present sequence represents a MAPK siNA which is used
 CC in the exemplification of the present invention.
 XX XX
 XX SQ Sequence 19 BP; 5 A; 6 C; 4 G; 0 T; 4 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 19;
 Best Local Similarity 68.4%; Pred. No. 6.9e+02;
 Matches 13; Conservative 3; Mismatches 3; Indels 0; Gaps 0;
 Qy 967 GTGCTACCGAGACCTCA 985
 Db 1 GUGCCUCCAGGAGUCAA 19
 ||||| ||||| ||||| |||||
 ||||| ||||| ||||| |||||
 RESULT 679
 ADE29840/c
 ID ADE29840 standard; RNA; 19 BP.

```
XX AC ADE29840;
XX DT 29-JAN-2004 (first entry)
XX DE Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:462.
XX KW short interfering nucleic acid; siNA; downregulation; inhibition;
XX KW mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;
XX KW cytosolic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;
XX KW immunosuppressive; antibacterial; antirheumatic; antiarthritic;
XX KW antipsoriatic; gastrointestinal; obesity; diabetes; tumour;
XX KW inflammatory disease; asthma; septic shock; rheumatoid arthritis;
XX KW psoriasis; inflammatory bowel disease; drug screening;
XX KW genetic engineering; pharmacogenomic; gene mapping; ss.
XX OS Synthetic.
XX PN WO2003072590-A1.
XX PD 04-SEP-2003.
XX PF 28-JAN-2003; 2003WO-US002510.
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 15-JAN-2003; 2003US-0440129P.
XX PA (SIRN-) SIRNA THERAPEUTICS INC.
XX PI Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;
XX DR WPI; 2003-689980/65.
XX PT New short interfering nucleic acid, useful e.g. for treatment and
XX PT diagnosis of cancer, downregulates expression of mitogen-activated
XX PT protein kinase genes.
XX PS Example 3; SEQ ID NO 462; 164pp; English.
XX CC The present invention describes a short interfering nucleic acid (siNA)
XX CC that downregulates expression of a mitogen-activated protein kinase
XX CC (MAPK) genes by RNA interference. Also described: (1) a method for
XX CC modulating expression of MAPK genes in cells, tissue explants or
XX CC organisms by introduction of siNA; (2) kits for in vitro or in vivo
XX CC delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)
XX CC vectors that express siNA and cells containing these vectors. MAPK siNAs
XX CC have cytostatic, anorectic, antidiabetic, antiinflammatory,
XX CC antiasthmatic, immunosuppressive, antibacterial, antirheumatic,
XX CC antiarthritic, antipsoriatic and gastrointestinal activities. The MAPK
XX CC siNAs can be used to modulate the expression of MAPK genes, in cells,
XX CC tissue explants or organisms, e.g. for treating obesity; diabetes types I
XX CC and II; a wide range of tumours, and inflammatory diseases (asthma,
XX CC septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel
XX CC disease). They can also be used for drug screening; diagnosis; target
XX CC identification and validation; genetic engineering; pharmacogenomics;
XX CC studying gene function and gene mapping (e.g. of single-nucleotide
XX CC polymorphisms). The present sequence represents a MAPK siNA which is used
XX CC in the exemplification of the present invention.
XX SQ Sequence 19 BP; 4 A; 4 C; 6 G; 0 T; 5 U; 0 Other;
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 967 GTGCTACCCGAGACTCA 985
Db 19 GTGCTCCACCGAGACTTAA 1
```

```
RESULT 680
AAQ24922
ID AAQ24922 standard; DNA; 20 BP.
XX AC AAQ24922;
XX DT 25-MAR-2003 (revised)
XX DT 19-NOV-1992 (first entry)
XX DE Chicken alpha-globin primer (242).
XX KW Single primer amplification; SPAR; ss.
XX OS Synthetic.
XX PN WO9207948-A1.
XX PD 14-MAY-1992.
XX PF 05-NOV-1991; 91WO-US008233.
XX PR 06-NOV-1990; 90US-00610973.
XX PR 29-JUL-1991; 91US-00737919.
XX PA (LUBR ) LUBRIZOL CORP.
XX PI Cardineau GA, Filner P;
XX DR WPI; 1992-183683/22.
XX PT Nucleic acid sequence single primer amplification - useful for genomic
XX PT variation analysis and polymorphism detection for restriction fragment
XX PT length data.
XX PS Claim 16; Page 39; 65pp; English.
XX CC The sequence originates from the chicken alpha-globin gene. It is the
XX CC complement of primer (227) (AAQ24908). The selected primer is used in
XX CC practice of the single primer amplification reaction (SPAR). (Updated on
XX CC 25-MAR-2003 to correct PN field.)
XX SQ Sequence 20 BP; 6 A; 10 C; 1 G; 3 T; 0 U; 0 Other;
XX Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 7.3e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1062 CCCAACAAAGACATACCTCC 1080
Db 1 CCCAACCAAGACCTACTTC 19
RESULT 681
AAT11973/c
ID AAT11973 standard; DNA; 20 BP.
XX AC AAT11973;
XX DT 25-MAR-2003 (revised)
XX DT 13-MAR-1996 (first entry)
XX DE CMV antisense oligonucleotide (ISIS 5476).
XX KW antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis;
XX KW intermediate early complex; IE1; IE2; DNA polymerase gene; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= a
```


CC cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or
 CC hybridisable to the E, E2, E4, E5, E6, E7, L1 or L2 reading frames of a
 CC papillomavirus. The PNAs can be used to target RNA and single stranded
 CC DNA (ssDNA) to produce antisense-type gene regulation moieties. Hence
 CC they may be used therapeutically for modulating cytomegalovirus and
 CC papillomavirus processes and also as diagnostics (e.g., as probes for
 CC specific mRNAs). PNA oligomers have high affinity for complementary
 CC single stranded DNA. They are also able to form triple helices in which a
 CC first PNA strand binds with RNA or ssDNA and a second PNA strand binds
 CC with the resulting double helix or with the first PNA strand. The PNAs
 CC possess no significant charge and are water soluble, which facilitates
 CC cellular uptake. Further, since they contain amides of non-biological
 CC amino acids, they are biostable and resistant to enzymatic degradation by
 CC proteases. The present sequence targets CMV IE2 nuclear localisation
 CC signal 2

XX
 SQ Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 131 GCATGAAGAGATCAACG 149
 Db 20 GCAGAGAGAGCAACG 2

RESULT 684
 AAQ94391
 ID AAQ94391 standard; DNA; 20 BP.

XX AC AAQ94391;
 XX 04-JUN-1996 (first entry)
 XX 5.8S ribosomal RNA gene ITS primer ITS2.

XX Plant pathogen; fungus; Septoria nodorum; Septoria tritici; Fusarium;
 KW Pseudocercospora herpotrichoides; Mycosphaerella fijiensis; PCR;
 KW Mycosphaerella musicola; amplification; primer; ribosomal RNA gene;
 KW internal transcribed region; strain; capture; colourimetric assay;
 KW isolate; development; population; ss.

XX Synthetic.

XX WO9529260-A2.

XX 02-NOV-1995.

XX 19-APR-1995; 95WO-US004712.

XX 25-APR-1994; 94US-00233608.

XX (CIBA) CIBA GEIGY AG.

XX Ligon JM, Beck JJ;

XX WPI; 1995-383005/49.

XX DNA encoding intervening transcribed sequence - used for detection of
 PT plant fungal pathogens.

XX Claim 5; Page 15; 65pp; English.

XX A novel method for the detection of plant pathogenic strains of fungi
 CC e.g. Septoria nodorum, S. tritici, Pseudocercospora herpotrichoides,
 CC Mycosphaerella fijiensis, M. musicola or Fusarium spp, involves the PCR
 CC amplification of sequences found in the internal transcribed region (ITS)
 CC of the 18S, 5.8S and 28S ribosomal RNA genes by the primers AAQ94359-93
 CC and AAQ05357-72. These primers are derived from the ITS sequences of
 CC these fungi (AAQ05357-72, AAQ05394-T05404 and AAQ94398) and are strain specific. The
 CC amplification products of the reactions using these primers can be used
 CC with the capture primers AAQ05378-93 in colourimetric assays. The primers

CC and ITS DNAs can be used for the detection of specific fungal pathogen
 CC isolates and in monitoring disease development in plant populations
 XX
 SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTGCGTCTTCGTCGATGC 1567
 Db 2 CTGCGTCTTCATCGATGC 20

RESULT 685
 AAQ94392/C
 ID AAQ94392 standard; DNA; 20 BP.

XX AC AAQ94392;
 XX 04-JUN-1996 (first entry)
 XX 5.8S ribosomal RNA gene ITS primer ITS3.

XX Plant pathogen; fungus; Septoria nodorum; Septoria tritici; Fusarium;
 KW Pseudocercospora herpotrichoides; Mycosphaerella fijiensis; PCR;
 KW Mycosphaerella musicola; amplification; primer; ribosomal RNA gene;
 KW internal transcribed region; strain; capture; colourimetric assay;
 KW isolate; development; population; ss.

XX Synthetic.

XX WO9529260-A2.

XX 02-NOV-1995.

XX 19-APR-1995; 95WO-US004712.

XX 25-APR-1994; 94US-00233608.

XX (CIBA) CIBA GEIGY AG.

XX Ligon JM, Beck JJ;

XX WPI; 1995-383005/49.

XX DNA encoding intervening transcribed sequence - used for detection of
 PT plant fungal pathogens.

XX Claim 5; Page 15; 65pp; English.

XX A novel method for the detection of plant pathogenic strains of fungi
 CC e.g. Septoria nodorum, S. tritici, Pseudocercospora herpotrichoides,
 CC Mycosphaerella fijiensis, M. musicola or Fusarium spp, involves the PCR
 CC amplification of sequences found in the internal transcribed region (ITS)
 CC of the 18S, 5.8S and 28S ribosomal RNA genes by the primers AAQ94359-93
 CC and AAQ05357-72. These primers are derived from the ITS sequences of
 CC these fungi (AAQ05394-T05404 and AAQ94398) and are strain specific. The
 CC amplification products of the reactions using these primers can be used
 CC with the capture primers AAQ05378-93 in colourimetric assays. The primers
 CC and ITS DNAs can be used for the detection of specific fungal pathogen
 CC isolates and in monitoring disease development in plant populations

XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTGCGTCTTCGTCGATGC 1567
 Db 19 CTGCGTCTTCATCGATGC 1


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RESULT 686
AAQ91602/c
ID AAQ91602 standard; DNA; 20 BP.
XX
XX AC AAQ91602;
XX
XX DT 05-FEB-1996 (first entry)
XX
XX DE Candida spp. internally transcribed spacer 3 (ITS3) primer.
XX
XX KW Internally transcribed spacer 3; ITS3; systemic candidiasis; detection;
XX KW diagnosis; universal primer; ss.
XX
XX OS Synthetic.
XX
XX PN US5426027-A.
XX
XX PD 20-JUN-1995.
XX
XX PF 20-MAY-1993; 93US-00065845.
XX
XX PR 20-MAY-1993; 93US-00065845.
XX
XX PA (USGO ) US GOVERNMENT.
XX
XX PI Zakroff S, Lasker B, Lott TJ, Morrison CJ, Reiss E;
XX
XX DR WPI; 1995-230900/30.
XX
XX PS Example 1; Col 6; 10pp; English.
XX
XX CC AAQ91602 is an universal primer for the Candida spp. internally
XX CC transcribed spacer 2 (ITS2). The ITS can be used for the detection of
XX CC Candida spp., partic. for the diagnosis of systemic candidiasis
XX
XX OS Synthetic.
XX
XX PN US5426027-A.
XX
XX PD 20-JUN-1995.
XX
XX PF 20-MAY-1993; 93US-00065845.
XX
XX PR 20-MAY-1993; 93US-00065845.
XX
XX PA (USGO ) US GOVERNMENT.
XX
XX PI Zakroff S, Lasker B, Lott TJ, Morrison CJ, Reiss E;
XX
XX DR WPI; 1995-230900/30.
XX
XX PS Example 1; Col 6; 10pp; English.
XX
XX CC AAQ91602 is an universal primer for the Candida spp. internally
XX CC transcribed spacer 2 (ITS2). The ITS can be used for the detection of
XX CC Candida spp., partic. for the diagnosis of systemic candidiasis
XX
XX OS Synthetic.
XX
XX PN US5426027-A.
XX
XX PD 20-JUN-1995.
XX
XX PF 20-MAY-1993; 93US-00065845.
XX
XX PR 20-MAY-1993; 93US-00065845.
XX

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCGGTCTTCGTCGATGC 1567
DB 19 CTGCGTTCTTCATCGATGC 1

RESULT 687
AAQ91604
ID AAQ91604 standard; DNA; 20 BP.
XX
XX AC AAQ91604;
XX
XX DT 05-FEB-1996 (first entry)
XX
XX DE Candida spp. internally transcribed spacer 2 (ITS2) primer.
XX
XX KW Internally transcribed spacer 2; ITS2; systemic candidiasis; detection;
XX KW diagnosis; universal primer; ss.
XX
XX OS Synthetic.
XX
XX PN US5426027-A.
XX
XX PD 20-JUN-1995.
XX
XX PF 20-MAY-1993; 93US-00065845.
XX
XX PR 20-MAY-1993; 93US-00065845.
XX

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCGGTCTTCGTCGATGC 1567
DB 19 CTGCGTTCTTCATCGATGC 1

RESULT 688
AAQ91604
ID AAQ91604 standard; DNA; 20 BP.
XX
XX AC AAQ91604;
XX
XX DT 19-JUL-1996 (first entry)
XX
XX DE Hepatitis C diagnostic oligonucleotide MR2.
XX
XX KW Diagnosis; hepatitis C virus; HCV; primer; amplify; detection;
XX KW hypervariable region; ss.
XX
XX OS Synthetic.
XX
XX PN JP07322881-A.
XX
XX PD 12-DEC-1995.
XX
XX PF 31-MAY-1994; 94JP-00142564.
XX
XX PR 31-MAY-1994; 94JP-00142564.
XX
XX PA (SRLS-) SRL KK.
XX
XX DR WPI; 1996-064846/07.
XX
XX PT Oligonucleotide primers for amplifying hepatitis C virus cDNA -
XX PT specifically the hyper-variable regions, useful for diagnosis of
XX PT hepatitis C.
XX
XX PS Claim 4; Page 2; 27pp; Japanese.
XX
XX CC The sequences given in AAQ91604-73 are oligonucleotides which are used in
XX CC the diagnosis of hepatitis C virus (HCV). These oligonucleotides acts as
XX CC primers to amplify region of the HCV genome, pref. hypervariable regions.
XX CC The amplified product is subjected to electrophoresis under denaturing
XX CC conditions. Preferably, primer MS1, MS2, MS3, MS4, MS5 or MS6 and an
XX CC oligo selected from MR1, MR2 or MR1' are used as primer pairs
XX
XX SQ Sequence 20 BP; 2 A; 6 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCGGTCTTCGTCGATGC 1567
DB 2 CTGCGTTCTTCATCGATGC 20

RESULT 689
AAQ91604
ID AAQ91604 standard; DNA; 20 BP.
XX
XX AC AAQ91604;
XX
XX DT 05-FEB-1996 (first entry)
XX
XX DE Candida spp. internally transcribed spacer 2 (ITS2) primer.
XX
XX KW Internally transcribed spacer 2; ITS2; systemic candidiasis; detection;
XX KW diagnosis; universal primer; ss.
XX
XX OS Synthetic.
XX
XX PN US5426027-A.
XX
XX PD 20-JUN-1995.
XX
XX PF 20-MAY-1993; 93US-00065845.
XX
XX PR 20-MAY-1993; 93US-00065845.
XX

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCGGTCTTCGTCGATGC 1567
DB 19 CTGCGTTCTTCATCGATGC 1

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```

Db      1  CCGTTGATGTGCCAGCTGC 19

RESULT 689
AAT47929
ID AAT47929 standard; DNA; 20 BP.
XX
AC AAT47929;
XX
DT 18-JUN-1997 (first entry)
XX
DE Primer for N-terminal L-proline-4-hydroxylase coding sequence.
XX
KW L-proline-4-hydroxylase; convert; catalyze; L-proline; production;
KW trans-4-hydroxy-L-proline; 2-ketoglutaric acid; ferrous ion;
KW industrial scale; intermediate; manufacture; drug; food additive; primer;
KW PCR; polymerase chain reaction; ss.
XX
OS Synthetic.
XX
PN WO9627669-Al.
XX
PD 12-SEP-1996.
XX
PF 07-MAR-1996; 96WO-JP0000559.
XX
PR 07-MAR-1995; 95JP-00046988.
XX
PA (KYOW) KYOWA HAKKO KOGYO KK.
XX
PI Ozaki A, Mori H, Shibasaki T;
XX
DR WPI; 1996-425429/42.
XX
PT DNA coding for L-proline-4-hydroxylase of microbial origin - for large
PT scale production of trans-4-hydroxy-L-proline, useful as an intermediate
PT in drug synthesis or as a food additive.
XX
PS Example 1; Page 51; 83pp; Japanese.
XX
CC AAT47929-30 are primers used to amplify the sequence encoding the N-
CC terminal of L-proline-4-hydroxylase (WO9291) from Dactylosporangium sp.
CC The enzyme converts L-proline to trans-4-hydroxy-L-proline in the
CC presence of 2-ketoglutaric acid and ferrous ions. The DNA (AAT47924) is
CC used for the efficient production of trans-4-hydroxy-L-proline on an
CC industrial scale for use as an intermediate in the manufacture of drugs
CC and as a food additive
XX
SQ Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 856 AAGGAGCTGAAGCAGTACC 874
Db 1 ACGGAGCTCAGCAGTACC 19

RESULT 690
AAX24129/c
ID AAX24129 standard; DNA; 20 BP.
XX
AC AAX24129;
XX
DT 27-AUG-2003 (revised)
DT 01-JUL-1999 (first entry)
XX
DE HSV-directed phosphonomonoester oligonucleotide analogue 5.
XX
KW Phosphonomonoester analogue; inhibitor; antisense; cancer; restenosis;
KW ribozyme; diagnostic agent; detection; treatment; disease; virus;

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KW integrin; cell-cell adhesion receptor; TNF-alpha; ss.
XX
OS Synthetic.
XX
PN Human herpesvirus 1.
XX
DE19508923-Al.
XX
PD 19-SEP-1996.
XX
PF 13-MAR-1995; 95DE-01008923.
XX
PR 13-MAR-1995; 95DE-01008923.
XX
PA (FARH) HOECHST AG.
XX
PI Anuschirwan P, Uhlmann E, Breipohl G, Wallmeier H;
XX
DR WPI; 1996-425893/43.
XX
PT New oligonucleotide analogues contg. phosphomonoester bridges - for
PT therapeutic inhibition of gene expression, e.g. in cancer or viral
PT infection, with good specificity and in vivo stability.
XX
PS Disclosure; Page 18; 36pp; German.
XX
CC This invention describes novel phosphonomonoester oligonucleotide
CC analogues which act as inhibitors of gene expression (as sense/antisense,
CC ribozyme or triplex-forming molecules), useful as diagnostic agents (i.e.
CC probes for detecting nucleic acid) or for treatment of diseases caused by
CC viruses, influenced by integrins or cell-cell adhesion receptors, induced
CC by factors such as TNF-alpha, or cancer or restenosis. The products of
CC the invention satisfy the requirements of good in-vivo stability; ability
CC to cross cellular and nuclear membranes, and specific binding to target
CC nucleic acid better than known oligonucleotides. (Updated on 27-AUG-2003
CC to correct OS field.)
XX
SQ Sequence 20 BP; 2 A; 2 C; 14 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 553 CCCCTCAGCGCGCGCTCC 571
Db 19 CCCCTCAGCGCGCTCC 1

RESULT 691
AAT66009/c
ID AAT66009 standard; DNA; 20 BP.
XX
AC AAT66009;
XX
DT 25-MAR-2003 (revised)
DT 18-JUN-1997 (first entry)
XX
DE Primer #2 to amplify repeat sequence marker Mfd106.
XX
KW Polymorphism; repeat sequence; genetic marker; primer; amplification;
KW PCR; polymerase chain reaction; paternity; maternity; human; pedigree;
KW linkage analysis; genetic disease; animal; plant; breeding; locus;
KW hybridisation; chromosome; ds.
XX
OS Synthetic.
XX
PN US5582979-A.
XX
PD 10-DEC-1996.
XX
PF 04-APR-1994; 94US-00222177.
XX
PR 21-APR-1989; 89US-00341562.
PR 05-SEP-1991; 91US-00754351.

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DT 24-SEP-1997 (first entry)
XX
DE Candida universal internal transcribed spacer primer, ITS2.
DE
KW Internal transcribed spacer; ITS; detection; probe; diagnosis;
KW systemic infection; candidiasis; primer; PCR; amplification;
KW polymerase chain reaction; ss.
XX
OS Synthetic.
XX
PN US5635353-A.
XX
XX 03-JUN-1997.
XX
PF 26-APR-1995; 95US-00429532.
XX
PR 20-MAY-1993; 93US-00065845.
XX
PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI Lasker B, Reiss E, Zakroff S, Lott TJ, Morrison CJ;
XX WPI; 1997-309822/28.
XX
PT Isolated nucleic acid specific for internal transcribed spacer of Candida
PT krusei - can be detected by specific probe for rapid and sensitive
PT diagnosis of systemic candidiasis.
XX
XX Example 2; Col 13-14; 10pp; English.
XX
CC The present sequence is an universal Candida internal transcribed spacer
CC (ITS) primer for the detection of ITS, useful to diagnose systemic
CC Candida infection, i.e. candidiasis. (Updated on 25-MAR-2003 to correct
CC PF field.)
XX
SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1549 CTTCGGTCTTCATCGATGC 1567
Db 2 CTGCGTCTTCATCGATGC 20
RESULT 695
AAT75523
ID AAT75523 standard; DNA; 20 BP.
XX
AC AAT75523;
XX
DT 25-MAR-2003 (revised)
XX 24-SEP-1997 (first entry)
XX
DE Candida universal internal transcribed spacer primer, ITS4.
XX
KW Internal transcribed spacer; ITS; detection; probe; diagnosis;
KW systemic infection; candidiasis; primer; PCR; amplification;
KW polymerase chain reaction; ss.
XX
OS Synthetic.
XX
PN US5635353-A.
XX
XX 03-JUN-1997.
XX
PF 26-APR-1995; 95US-00429532.
XX
PR 20-MAY-1993; 93US-00065845.
XX
PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI Lasker B, Reiss E, Zakroff S, Lott TJ, Morrison CJ;
XX WPI; 1997-309822/28.
XX
PT Isolated nucleic acid specific for internal transcribed spacer of Candida
PT krusei - can be detected by specific probe for rapid and sensitive
PT diagnosis of systemic candidiasis.
XX
XX Example 2; Col 13-14; 10pp; English.
XX
CC The present sequence is an universal Candida internal transcribed spacer
CC (ITS) primer for the detection of ITS, useful to diagnose systemic
CC Candida infection, i.e. candidiasis. (Updated on 25-MAR-2003 to correct
CC PF field.)
XX
SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1549 CTTCGGTCTTCATCGATGC 1567
Db 19 CTGCGTCTTCATCGATGC 1
RESULT 695
AAT75523
ID AAT75523 standard; DNA; 20 BP.
XX
AC AAT75523;
XX
DT 25-MAR-2003 (revised)
XX 24-SEP-1997 (first entry)
XX
DE Candida universal internal transcribed spacer primer, ITS4.
XX
KW Internal transcribed spacer; ITS; detection; probe; diagnosis;
KW systemic infection; candidiasis; primer; PCR; amplification;
KW polymerase chain reaction; ss.
XX
OS Synthetic.
XX
PN US5635353-A.
XX
XX 03-JUN-1997.
XX
PF 26-APR-1995; 95US-00429532.
XX
PR 20-MAY-1993; 93US-00065845.
XX
PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI Lasker B, Reiss E, Zakroff S, Lott TJ, Morrison CJ;
XX WPI; 1997-309822/28.
XX
PT Isolated nucleic acid specific for internal transcribed spacer of Candida
PT krusei - can be detected by specific probe for rapid and sensitive
PT diagnosis of systemic candidiasis.
XX
XX Example 2; Col 13-14; 10pp; English.
XX
CC The present sequence is an universal Candida internal transcribed spacer
CC (ITS) primer for the detection of ITS, useful to diagnose systemic
CC Candida infection, i.e. candidiasis. (Updated on 25-MAR-2003 to correct
CC PF field.)
XX
SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1549 CTTCGGTCTTCATCGATGC 1567
Db 2 CTGCGTCTTCATCGATGC 20
RESULT 696
AAT68379/C
ID AAT68379 standard; DNA; 20 BP.
XX
AC AAT68379;
XX
DT 11-AUG-1997 (first entry)
XX
DE Loci-specific primer for assessing integrity of human Y chromosome.
XX
KW Y chromosome; integrity; chromosome locus; primer; amplification; PCR;
KW polymerase chain reaction; fertility; azoospermia; oligospermia;
KW infertility; diagnosis; DYS209; DYP4381; DYS210; DYS211; DYS33; DYS1; SMCX;
KW DAZ(1); DYS218; DYS219; DYS212; DYP5381; DYS205; DYS281; MIC2; DYS201;
KW DYS241; DYS198; SRY; DYS197; DYS196; DYS240; DYS271; DYS221; KAL182;
KW DAZ(2); DYS224; DYS222; DYS227; DYS229; DYZ1; DYS230; DAZ(3);
KW DAZ(4); DAZ(5); SMCY; DYS217; DYS220; DYS223; DYS7; DYS237; DYS7;
KW DYS237; DAZ(6); DAZ(7); DAZ(8); DAZ(9); DAZ(10); DAZ(11); YRRM1; ZFY;
KW BKM; ss.
XX
OS Homo sapiens.
XX
PN WO9641007-A1.
XX
PD 19-DEC-1996.
XX
PF 06-JUN-1996; 96WO-US009421.
XX
PR 07-JUN-1995; 95US-00472416.
XX 18-SEP-1995; 95US-00531556.
XX
PA (PROM-) PROMEGA CORP.
XX
XX First MK, Agoulunik AI, Muallem A;
XX WPI; 1997-099942/09.
XX
PT Assessing integrity of Y chromosome - by amplification of selected human
PT chromosome loci by multiplex PCR and comparison with normal control DNA.
XX
PS Claim 2; Page 73; 11pp; English.
XX
CC AAT68369-T68381 and AAT70842 are a set of primers used in a method for
CC assessing the integrity of a Y chromosome. The primers are capable of
CC priming the chromosome loci: SMCY, DYS217, DYS220, DYS223, DYS7, DYS237,
CC DYS215, MIC2 and DAZ(6) and MIC2. The method can be used to rapidly and
CC reproducibly assess the integrity of specific regions of the Y chromosome
```

CC that are associated with male fertility. It can be used to assess the
 CC integrity of the Y chromosome in males exhibiting azoospermia or
 CC oligospermia (no or very little spermatozoa in the semen) or to assess
 CC the genotype of infants of phenotypically ambiguous sexuality. The method
 CC can also be used in diagnosis and quality control

XX Sequence 20 BP; 3 A; 3 C; 6 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1483 CACAACTCTCTGACACTA 1501
 DB 19 CAATAACTCTCTGAGACCA 1

RESULT 697
 AAV62540/C
 ID AAV62540 standard; DNA; 20 BP.
 XX AC AAV62540;
 XX 17-DEC-1998 (first entry)
 XX Ribosomal gene 5.8S rDNA specific primer ITS3.
 XX Internal transcribed spacer; ITS; ribosomal RNA; Fusarium avenaceum;
 KW Fusarium culmorum; Fusarium graminearum; Fusarium moniliforme; plant;
 KW Septoria avenae; Microdochium nivale; Fusarium poae; fungal pathogen;
 KW PCR; nucleic acid detection; PCR primer; ss.

XX Synthetic.
 OS Fusarium sp.
 OS US5814453-A.
 XX 29-SEP-1998.

XX 02-JUL-1997; 97US-00887480.
 XX 19-APR-1995; 95WO-US004712.
 XX 15-OCT-1996; 96US-00722187.

XX (NOVS) NOVARTIS FINANCE CORP.

XX Beck JJ;
 XX WPI; 1998-541745/46.
 XX DNA isolated from fungal RNA, and its internal transcribed spacer
 XX sequence - used for detecting fungal pathogens in plant tissue.

XX Example 6; Col 17; 56pp; English.

XX Sequences AAV62507 to AAV62566 represent species specific PCR primers for
 CC various fungal isolates used for fungal detection in the course of the
 CC invention. The primers are designed based on the internal transcribed
 CC spacer (ITS) sequences of the various fungal species. The invention
 CC provides a DNA molecule isolated from the ribosomal RNA gene region of a
 CC fungal pathogen, where the DNA molecule consists of an ITS sequence
 CC selected from ITS1 and ITS2 of Fusarium culmorum, Fusarium graminearum,
 CC Fusarium moniliforme, Septoria avenae or Microdochium nivale. A method
 CC for detecting F. graminearum, F. culmorum, F. moniliforme, F. poae, F.
 CC avenaceum and M. nivale isolates is also provided which comprises
 CC isolating DNA from a plant leaf infected with at least one of the above
 CC pathogens and amplifying parts of the ITS sequence of the pathogen(s) by
 CC PCR using specific primers from within these sequences. The pathogen(s)
 CC are detected by visualising the amplified part of the ITS sequence

XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;

Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1549 CTTGGTCTTCGTGATGC 1567
 DB 19 CTGGCTTCTTCATCGATGC 1

RESULT 698
 AAV62539
 ID AAV62539 standard; DNA; 20 BP.
 XX AC AAV62539;
 XX 17-DEC-1998 (first entry)

XX Ribosomal gene 5.8S rDNA specific primer ITS2.
 XX Internal transcribed spacer; ITS; ribosomal RNA; Fusarium avenaceum;
 KW Fusarium culmorum; Fusarium graminearum; Fusarium moniliforme; plant;
 KW Septoria avenae; Microdochium nivale; Fusarium poae; fungal pathogen;
 KW PCR; nucleic acid detection; PCR primer; ss.

XX Synthetic.
 OS Fusarium sp.
 OS US5814453-A.

XX 29-SEP-1998.

XX 02-JUL-1997; 97US-00887480.

XX 19-APR-1995; 95WO-US004712.

XX 15-OCT-1996; 96US-00722187.

XX (NOVS) NOVARTIS FINANCE CORP.

XX Beck JJ;

XX WPI; 1998-541745/46.

XX DNA isolated from fungal RNA, and its internal transcribed spacer
 XX sequence - used for detecting fungal pathogens in plant tissue.

XX Example 6; Col 17; 56pp; English.

XX Sequences AAV62507 to AAV62566 represent species specific PCR primers for
 CC various fungal isolates used for fungal detection in the course of the
 CC invention. The primers are designed based on the internal transcribed
 CC spacer (ITS) sequences of the various fungal species. The invention
 CC provides a DNA molecule isolated from the ribosomal RNA gene region of a
 CC fungal pathogen, where the DNA molecule consists of an ITS sequence
 CC selected from ITS1 and ITS2 of Fusarium culmorum, Fusarium graminearum,
 CC Fusarium moniliforme, Septoria avenae or Microdochium nivale. A method
 CC for detecting F. graminearum, F. culmorum, F. moniliforme, F. poae, F.
 CC avenaceum and M. nivale isolates is also provided which comprises
 CC isolating DNA from a plant leaf infected with at least one of the above
 CC pathogens and amplifying parts of the ITS sequence of the pathogen(s) by
 CC PCR using specific primers from within these sequences. The pathogen(s)
 CC are detected by visualising the amplified part of the ITS sequence

XX Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTGGTCTTCGTGATGC 1567
 DB 2 CTGGCTTCTTCATCGATGC 20

RESULT 699

AAV59027/C	
ID	AAV59027 standard; DNA; 20 BP.
XX	
XX	AAV59027;
XX	
XX	AC
XX	
XX	25-MAR-2003 (revised)
DT	06-JAN-1999 (first entry)
DT	
XX	
XX	Internal transcribed spacer primer ITS3.
DE	
DE	Internal transcribed spacer; ITS; Microdochium; Fusarium; wheat pathogen;
XX	fungal pathogen identification; infection identification; PCR primer; ss.
OS	
OS	Synthetic.
OS	Fusarium sp.
XX	
XX	US9827695-A.
XX	
XX	27-OCT-1998.
PD	
XX	
XX	04-AUG-1997; 97US-00905314.
XX	
XX	04-AUG-1997; 97US-00905314.
XX	
XX	(NOVS) NOVARTIS FINANCE CORP.
XX	
XX	Beck JJ;
FI	
FI	WPI; 1998-593995/50.
XX	
XX	Wheat pathogen internal transcribed spacer sequences - used as a basis
PPT	for primers for the species-specific polymerase chain reaction detection
PPT	of the pathogens.
PT	
PT	Example 5; Col 10; 20pp; English.
XX	
XX	This sequence represents a primer based on an internal transcribed spacer
CC	(ITS) sequence of the invention. Primer pairs, based on the ITS
CC	sequences, are used for the PCR amplification detection of wheat
CC	Microdochium and Fusarium fungal pathogens, especially M. nivale, F.
CC	graminearum, F. culmorum, F. avenaceum, F. poae, F. moniliforme or F.
CC	roseum. The two different strains of fungi show different symptoms during
CC	infection, which may or may not be due to infection. Early identification
CC	of the strain causing the infection allows early, and more specific
CC	fungal treatment. (Updated on 25-MAR-2003 to correct PF field.)
CC	(Updated on 25-MAR-2003 to correct PR field.)
XX	
XX	Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
XX	
XX	Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX	Best Local Similarity 84.2%; Pred: No. 7.3e+02;
XX	Matches 16; Conservative 0; Mismatches 3; Indels 0; Caps 0
QY	1549 CTTGGTCTCTCGATGC 1567
Db	19 CTGCGTCTCTCATCGATGC 1
RESULT 700	
AAV59024	
ID	AAV59024 standard; DNA; 20 BP.
XX	
XX	AAV59024;
XX	
XX	25-MAR-2003 (revised)
DT	06-JAN-1999 (first entry)
DT	
XX	
DE	Internal transcribed spacer primer ITS28.
XX	
XX	Internal transcribed spacer; ITS; Microdochium; Fusarium; wheat pathogen;
KW	fungal pathogen identification; infection identification; PCR primer; ss.
XX	
XX	Synthetic.
OS	

XX DE PCR primer 2 used to amplify human loci DYS7 DNA.
 XX PA Assay; Y chromosome; Y chromosome loci; human; male fertility; detection;
 KW deletion mutation; male infertility; PCR primer; ss.
 XX OS Synthetic.
 OS Homo sapiens.
 XX WO9824937-A2.
 XX PD 11-JUN-1998.
 XX PF 04-DEC-1997; 97WO-US023136.
 XX PR 04-DEC-1996; 96US-00753979.
 XX PA (PROM-) PROMEGA CORP.
 XX PI First MK, Muallem A;
 XX DR WPI; 1998-333352/29.
 XX XX Assessing Y chromosome integrity in predicting human male infertility -
 PT by amplifying specific regions of human Y chromosome linked to normal
 PT fertility by multiplex PCR and detecting deletion mutations.
 XX Claim 2; Page 35; 47pp; English.
 XX XX PCR primers AAV42472-511 are used in a method for assessing the integrity
 CC of a Y chromosome. Genomic DNA, or blood, from a subject is combined with
 CC several distinct oligonucleotide primer pairs capable of simultaneously
 CC priming several human Y chromosome loci which are linked to normal
 CC fertility in human males. The present primer pair (AAV42502-03) amplify
 CC loci DYS7. The primer pairs are amplified by multiplex PCR, yielding
 CC amplified chromosomal DNA fragments which are isolated and compared with
 CC those from normal male subjects. The method is useful to detect deletion
 CC mutations on a Y chromosome which are predictive of human male
 CC infertility
 XX Sequence 20 BP; 3 A; 3 C; 6 G; 8 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1483 CACAAACTTCTCGACACTA 1501
 Db 19 CAAAAACTTCTCGAGACCA 1
 RESULT 705
 AAV22643/C
 ID AAV22643 standard; DNA; 20 BP.
 XX AC AAV22643;
 XX DT 10-JUL-1998 (first entry)
 XX DE PCR primer specific for Phytophthora infestans sequences.
 XX KW Phytophthora; potato; late-blight; P. infestans; P. erythrospetia;
 KW P. nicotianae; pink rot; detection; disease; PCR primer; ss.
 XX OS Synthetic.
 OS Phytophthora infestans.
 XX WO9808862-A1.
 XX PD 05-MAR-1998.
 XX PF 28-AUG-1997; 97WO-US015143.
 XX XX

PR 28-AUG-1996; 96US-00704207.
 XX PA (USDA) US SEC OF AGRIC.
 XX PI Tooley P, Bunyard B, Carras M, Hatziloukas E;
 XX WPI; 1998-179378/16.
 XX DR Oligonucleotide primers for PCR detection of Phytophthora spp. - e.g. to
 XX detect P. infestans, which causes potato light blight and distinguish
 XX from P. erythrospetia and P. nicotianae, which cause pink rot.
 XX Claim 2; Page 27; 40pp; English.
 XX XX PCR primers AAV22642-46 are specific for Phytophthora species which
 CC infect potatoes and cause diseases such as late-blight. PCR primers
 CC AAV22642-43 amplify a 456 bp fragment from P. infestans. PCR primers
 CC AAV22644-45 amplify a 136 bp fragment from P. erythrospetia, and PCR
 CC primers AAV22643 and AAV22646 amplify a 455 bp fragment from P.
 CC nicotianae. The primer sets are useful for detecting Phytophthora species
 CC by PCR. Phytophthora species infecting potatoes may result in late blight
 CC (caused by P. infestans) or in pink rot (caused by P. erythrospetia and
 CC P. nicotianae), and the primers can detect these diseases and
 CC differentiate between them
 XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1549 CTTCGGTCTTCGTCGATGC 1567
 Db 19 CTTCGGTCTTCGTCGATGC 1
 RESULT 706
 AAV18199/C
 ID AAV18199 standard; DNA; 20 BP.
 XX AC AAV18199;
 XX DT 28-AUG-1998 (first entry)
 XX DE Primer for Fanconi anaemia of complementation group A gene.
 XX KW Fanconi anaemia of complementation group A; FA-A; Genetic defect;
 KW prenatal FA-A; FA-A carrier detection; disease diagnosis; PCR primer; ss.
 XX OS Synthetic.
 OS Homo sapiens.
 XX WO9814462-A1.
 XX PD 09-APR-1998.
 XX PF 03-OCT-1997; 97WO-US018010.
 XX PR 04-OCT-1996; 96US-00726012.
 XX PA (FANC-) FANCONI ANEMIA RES FUND INC.
 XX PI Joenje H, Lo Ten Foe JR;
 XX WPI; 1998-240012/21.
 XX XX DNA for Fanconi Anaemia complementation group A - useful for, e.g.
 PT developing products for diagnosis and screening of disease and gene
 PT therapy.
 XX Disclosure; Page 11; 63pp; English.
 XX PS This sequence represents a PCR primer for the DNA encoding the Fanconi
 CC

CC anaemia of complementation group A (FA-A) protein of the invention. The
 CC amplified DNA's may be used to complement a genetic defect in a cell
 CC (especially the FA-A gene). The products can be used for screening
 CC (especially prenatal FA-A), detection of FA-A carriers and FA-A disease
 CC diagnosis
 CC
 SQ Sequence 20 BP; 5 A; 6 C; 6 G; 3 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 259 GAGGCCCCACACGCTGCTG 277
 DB 19 GAGTCCCCCACATGCTG 1

RESULT 707
 AAV70045/c
 ID AAV70045 standard; DNA; 20 BP.
 XX
 AC AAV70045;
 XX
 DT 04-FEB-1999 (first entry)
 XX
 DE Rat c-Fos protein antisense oligonucleotide #99.
 XX
 KW Rat; c-fos; c-jun; activating protein 1; AP-1; diagnosis; metastasis;
 KW antisense oligonucleotide; phosphorothioate; regulation;
 KW malignant tumour; cell cycle expression; hyperproliferative disease; ss.
 XX
 OS Synthetic.
 OS Rattus sp.
 XX
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /tag= a
 FT /note= "phosphorothioate linkages"
 XX
 PN WO9846272-A1.
 XX
 DD 22-OCT-1998.
 XX
 PF 14-APR-1998; 98WO-US007386.
 XX
 PR 14-APR-1997; 97US-00837201.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Dean NM, McKay R, Miraglia L, Baker B;
 XX
 DR WPI; 1998-609906/51.
 XX
 XX
 PT Antisense oligonucleotides regulating Activating Protein 1 subunits -
 PT hybridise with c-fos and c-jun mRNA, used for regulating metastasis, cell
 PT cycle expression and hyperproliferative disease.
 XX
 XX Example 9; Page 57; 120pp; English.

AAV70042 to AAV70052 represent antisense oligonucleotides which are
 CC specifically hybridisable with a region of a nucleic acid encoding rat c-
 CC Fos protein. The antisense compound regulates the expression of the c-Fos
 CC protein. The present invention also describes antisense oligonucleotides
 CC which regulate the c-Jun protein. The antisense oligonucleotides are used
 CC for the diagnosis and treatment of diseases or disorders associated with
 CC Activating Protein 1 expression, of which c-Fos and c-Jun are subunits.
 CC The antisense oligonucleotides are used in compositions as c-Fos and/or c-
 CC -Jun together with a carrier and a chemotherapeutic agent. They are used
 CC to regulate the expression of c-Fos or c-Jun in cells or tissues,
 CC preferably by inhibiting metastasis. They also regulate cell cycle
 CC expression and can be used to treat an animal with, or being prone to, a
 CC hyperproliferative disease
 CC
 XX

SQ Sequence 20 BP; 2 A; 2 C; 11 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1720 AGCCATGTTTACCTGCCCA 1738
 DB 19 AGCCATCTCCACCAGCCCA 1

RESULT 708
 AAV24006/c
 ID AAV24006 standard; DNA; 20 BP.
 XX
 AC AAV24006;
 XX
 DT 27-AUG-2003 (revised)
 DT 06-AUG-1998 (first entry)
 XX
 DE Primer ITS3 for Candida nucleic acid sequences.
 XX
 KW PCR primer; Candida detection; Aspergillus; systemic candidiasis; ss.
 XX
 OS Synthetic.
 OS Candida.
 XX
 PN WO9811257-A1.
 XX
 PD 19-MAR-1998.
 XX
 PF 15-SEP-1997; 97WO-US016423.
 XX
 PR 16-SEP-1996; 96US-0026387P.
 XX
 PA (USSH) US DEPT HEALTH & HUMAN SERVICES.
 XX
 PI Morrison CJ, Reiss E, Holloway B, Shin JH;
 XX
 DR WPI; 1998-216957/19.
 XX
 PT Probes for detection of Candida species - useful for diagnosis of
 PT systemic candidiasis.
 XX
 PS Example 1; Page 16; 55pp; English.
 XX
 CC This sequence represents a primer for Candida nucleic acid sequences. The
 CC amplified sequences are recognised by the probes of the invention. The
 CC probes can be used in the method of the invention for the detection of
 CC Aspergillus sp. and Candida sp. in a sample. The probes can be used to
 CC diagnose systemic candidiasis. (Updated on 27-AUG-2003 to correct OS
 CC field.)
 XX
 SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCGGTCTTCGTGATGC 1567
 DB 19 CTGCGTTCTTCATCGATGC 1

RESULT 709
 AAV24009
 ID AAV24009 standard; DNA; 20 BP.
 XX
 AC AAV24009;
 XX
 DT 27-AUG-2003 (revised)
 DT 06-AUG-1998 (first entry)
 XX

DE Primer ITS2 for Candida nucleic acid sequences.
 XX PCR primer; Candida detection; Aspergillus; systemic candidiasis; ss.
 XX Synthetic.
 OS Candida.
 OS WO9811257-A1.
 PN 19-MAR-1998.
 XX 15-SEP-1997; 97WO-US016423.
 PF 16-SEP-1996; 96US-0026387P.
 PR (USSH) US DEPT HEALTH & HUMAN SERVICES.
 XX Morrison CJ, Reiss E, Holloway B, Shin JH;
 XX WPI; 1998-216957/19.
 DR Probes for detection of Candida species - useful for diagnosis of
 PT systemic candidiasis.
 PT Example 2; Page 47; 55pp; English.
 PS This sequence represents a primer for Candida nucleic acid sequences. The
 CC amplified sequences are recognised by the probes of the invention. The
 CC probes can be used in the method of the invention for the detection of
 CC Aspergillus sp. and Candida sp. in a sample. The probes can be used to
 CC diagnose systemic candidiasis. (Updated on 27-AUG-2003 to correct OS
 CC field.)
 XX Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1549 CTTCCGGTCTTCGCGATGC 1567
 DB |||||
 2 CTTCCGGTCTTCGCGATGC 20
 RESULT 710
 AAT89974/C
 ID AAT89974 standard; DNA; 20 BP.
 XX AAT89974;
 AC AAT89974;
 XX 20-MAR-1998 (first entry)
 DT Candida albicans ITS2 rDNA PCR primer ITS3.
 DE ITS2 rDNA; systemic candidiasis; pathogen; diagnosis; PCR primer; ss.
 XX Synthetic.
 OS Candida albicans.
 OS US5688644-A.
 PN 18-NOV-1997.
 PD 26-APR-1995; 95US-00429520.
 PF 20-MAY-1993; 93US-00065845.
 PR (USGO) US GOVERNMENT.
 PA Lasker B, Reiss E, Zakroff S, Lott TJ, Morrison CJ;
 XX WPI; 1998-007977/01.
 DR Diagnosis of systemic candidiasis by hybridisation assay - using probes
 PT specific for new or known Candida DNA sequences.
 XX Disclosure; Col 6; 11pp; English.
 PS PCR primers AAT89973-T89976 and AAT89982 are used to amplify the ITS2
 CC region of Candida albicans. This amplified region is used in a novel
 CC method for diagnosing systemic candidiasis and comprises hybridising DNA
 CC released from lysed Candida cells in a blood sample with a probe specific
 CC for the ITS2 region. Probes derived from this region can be used for
 CC detecting pathogenic Candida spp. such as C. tropicalis, C. glabrata, C.
 CC krusei, C. parapsilosis or C. albicans in immunocompromised hosts. One
 CC Candida cell per microlitre of blood can be detected
 XX Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1549 CTTCCGGTCTTCGCGATGC 1567
 DB |||||
 2 CTTCCGGTCTTCGCGATGC 20
 RESULT 710
 AAT89974/C
 ID AAT89974 standard; DNA; 20 BP.
 XX AAT89974;
 AC AAT89974;
 XX 20-MAR-1998 (first entry)
 DT Candida albicans ITS2 rDNA PCR primer ITS3.
 DE ITS2 rDNA; systemic candidiasis; pathogen; diagnosis; PCR primer; ss.
 XX Synthetic.
 OS Candida albicans.
 OS US5688644-A.
 PN 18-NOV-1997.
 PD 26-APR-1995; 95US-00429520.
 PF 20-MAY-1993; 93US-00065845.
 PR (USGO) US GOVERNMENT.
 PA Lasker B, Reiss E, Zakroff S, Lott TJ, Morrison CJ;
 XX WPI; 1998-007977/01.
 DR Diagnosis of systemic candidiasis by hybridisation assay - using probes
 PT specific for new or known Candida DNA sequences.
 XX Disclosure; Col 6; 11pp; English.
 PS PCR primers AAT89973-T89976 and AAT89982 are used to amplify the ITS2
 CC region of Candida albicans. This amplified region is used in a novel
 CC method for diagnosing systemic candidiasis and comprises hybridising DNA
 CC released from lysed Candida cells in a blood sample with a probe specific
 CC for the ITS2 region. Probes derived from this region can be used for
 CC detecting pathogenic Candida spp. such as C. tropicalis, C. glabrata, C.
 CC krusei, C. parapsilosis or C. albicans in immunocompromised hosts. One
 CC Candida cell per microlitre of blood can be detected
 XX Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

PT Diagnosis of systemic candidiasis by hybridisation assay - using probes
 XX specific for new or known Candida DNA sequences.
 XX Example 1; Col 6; 11pp; English.
 PS PCR primers AAT89973-T89976 and AAT89982 are used to amplify the ITS2
 CC region of Candida albicans. This amplified region is used in a novel
 CC method for diagnosing systemic candidiasis and comprises hybridising DNA
 CC released from lysed Candida cells in a blood sample with a probe specific
 CC for the ITS2 region. Probes derived from this region can be used for
 CC detecting pathogenic Candida spp. such as C. tropicalis, C. glabrata, C.
 CC krusei, C. parapsilosis or C. albicans in immunocompromised hosts. One
 CC Candida cell per microlitre of blood can be detected
 XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCCGGTCTTCGCGATGC 1567
 DB |||||
 19 CTTCCGGTCTTCGCGATGC 1

RESULT 711
 AAT89976
 ID AAT89976 standard; DNA; 20 BP.
 XX AAT89976;
 AC AAT89976;
 XX 20-MAR-1998 (first entry)
 DT Candida albicans ITS2 rDNA PCR primer 1.
 DE ITS2 rDNA; systemic candidiasis; pathogen; diagnosis; PCR primer; ss.
 XX Synthetic.
 OS Candida albicans.
 OS US5688644-A.
 PN 18-NOV-1997.
 PD 26-APR-1995; 95US-00429520.
 PF 20-MAY-1993; 93US-00065845.
 PR (USGO) US GOVERNMENT.
 PA Lasker B, Reiss E, Zakroff S, Lott TJ, Morrison CJ;
 XX WPI; 1998-007977/01.
 DR Diagnosis of systemic candidiasis by hybridisation assay - using probes
 PT specific for new or known Candida DNA sequences.
 XX Disclosure; Col 6; 11pp; English.
 PS PCR primers AAT89973-T89976 and AAT89982 are used to amplify the ITS2
 CC region of Candida albicans. This amplified region is used in a novel
 CC method for diagnosing systemic candidiasis and comprises hybridising DNA
 CC released from lysed Candida cells in a blood sample with a probe specific
 CC for the ITS2 region. Probes derived from this region can be used for
 CC detecting pathogenic Candida spp. such as C. tropicalis, C. glabrata, C.
 CC krusei, C. parapsilosis or C. albicans in immunocompromised hosts. One
 CC Candida cell per microlitre of blood can be detected
 XX Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;

```
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1549 CTTCGGTCTTCGTCGATGC 1567
    |||||
Db 2 CTTCGGTCTTCGTCGATGC 20

RESULT 712
AAAX17950/C
ID AAAX17950 standard; DNA; 20 BP.
XX
XX AC AAAX17950;
XX
XX DT 11-MAY-1999 (first entry)
XX
XX DE Anti-CMV oligonucleotide #15104.
XX
XX KW Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;
XX cytomagalovirus; inhibition; replication; sugar modification;
XX phosphorothioate; infection; retinitis; ss.
XX
XX OS Synthetic.
XX Human herpesvirus 5.
XX
XX PN WO9845314-A1.
XX
XX PD 15-OCT-1998.
XX
XX PF 07-APR-1998; 98WO-US006895.
XX
XX PR 09-APR-1997; 97US-00838715.
XX
XX PA (ISIS-) ISIS PHARM INC.
XX
XX PI Draper KG, Kisner DL, Anderson KP, Chapman S;
XX
XX DR WPI; 1998-568330/48.
XX
XX PT New antisense oligonucleotides that target cytomegalovirus nucleic acid -
XX particularly including 2'-methoxyethoxy sugar modifications, especially
XX for treating viral retinitis, with long-lasting retention in the retina.
XX
XX PS Claim 7; Page 32; 99pp; English.
XX
XX CC This antisense oligonucleotide is targeted to a nucleic acid sequence in
XX the IE (immediate early) 2' region of the cytomegalovirus (CMV) genome and
XX is able to inhibit CMV replication. Optionally the oligonucleotide
XX include at least one 2'-(2-methoxyethoxy) sugar modification or
XX phosphorothioate internucleotide linkages. The oligonucleotides (AAAX17861
XX -X17924) are also used to inhibit CMV infections (by in vivo or in vitro
XX contact with cells, tissues or body fluids), especially to treat or
XX prevent CMV infections, particularly retinitis
XX
XX SQ Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
QY 131 GGATGAAGAGATCAAAACG 149
    |||||
Db 20 GCAAGAAGAGAGCAAAACG 2

RESULT 713
AAAX17890/C
ID AAAX17890 standard; DNA; 20 BP.
XX
XX AC AAAX17890;
XX
XX DT 11-MAY-1999 (first entry)
XX
XX DE Anti-CMV oligonucleotide #5476.
XX
XX KW Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;
XX cytomagalovirus; inhibition; replication; sugar modification;
XX phosphorothioate; infection; retinitis; ss.
XX
XX OS Synthetic.
XX Human herpesvirus 5.
XX
XX PN WO9845314-A1.
XX
XX PD 15-OCT-1998.
XX
XX PF 07-APR-1998; 98WO-US006895.
XX
XX PR 09-APR-1997; 97US-00838715.
XX
XX PA (ISIS-) ISIS PHARM INC.
XX
XX PI Draper KG, Kisner DL, Anderson KP, Chapman S;
XX
XX DR WPI; 1998-568330/48.
XX
XX PT New antisense oligonucleotides that target cytomegalovirus nucleic acid -
XX particularly including 2'-methoxyethoxy sugar modifications, especially
XX for treating viral retinitis, with long-lasting retention in the retina.
XX
XX PS Claim 7; Page 30; 99pp; English.
XX
XX CC Antisense oligonucleotides (AAAX17861-X17924) are targeted to a nucleic
XX acid (AAAX17925-X17948) encoding IE (immediate early) 1 or 2, or DNA
XX polymerase of cytomegalovirus (CMV) and are able to inhibit CMV
XX replication. Optionally the oligonucleotides include at least one 2'-(2-
XX methoxyethoxy) sugar modification or phosphorothioate internucleotide
XX linkages. The oligonucleotides are used to inhibit CMV infections (by in
XX vivo or in vitro contact with cells, tissues or body fluids), especially
XX to treat or prevent CMV infections, particularly retinitis
XX
XX SQ Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 131 GGATGAAGAGATCAAAACG 149
    |||||
Db 20 GCAAGAAGAGAGCAAAACG 2

RESULT 714
AAZ18075
ID AAZ18075 standard; DNA; 20 BP.
XX
XX AC AAZ18075;
XX
XX DT 11-OCT-1999 (first entry)
XX
XX DE MAP 5 gene specific primer.
XX
```

KW Genetic proximity; gene expression; cell characterisation; homeobox gene;
 KW Genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
 KW Kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
 KW primer; ss.
 XX Synthetic.
 OS Homo sapiens.
 XX WO9934016-A2.
 XX PD 08-JUL-1999.
 XX PF 28-DEC-1998; 98WO-IL000625.
 XX PR 29-DEC-1997; 97IL-00122793.
 PR 16-OCT-1998; 98IL-00126627.
 XX (GENE-) GENENA LTD.
 PA Vidar B;
 XX WPI; 1999-419113/35.
 DR P-PSDB; AAY14610.
 XX Identifying and characterizing cells by comparing the pattern of gene
 PT expression in a selected gene family.
 PS Claim 4; Page 41; 102pp; English.
 XX The invention provides a new method for identifying and characterising
 CC cells. The method for determining the genetic proximity of a first cell
 CC and a second cell comprises: (a) obtaining the first cell and the second
 CC cell; (b) determining in the first cell and the second cell the pattern
 CC of expression of genes in a selected gene family; and (c) calculating a
 CC proximity index using a specified formula. The methods can be used for
 CC characterising cells, e.g. for determining the origin of a cell, its
 CC genetic status, whether it carries a genetic defect, or whether it is
 CC transformed. They can be used for detecting a selected genetic defect in
 CC an individual, e.g. a fetus. They can also be used for determining the
 CC effect of a selected treatment on a test cell. They can also be used for
 CC obtaining cells capable of expressing an homeobox related desired
 CC property. The method uses reverse transcriptase polymerase chain reaction
 CC in the RT-PCR reactions to determine the pattern of gene expression in a selected
 CC gene family. Sequences AAZ17803-Z18342 represent primers that can be used
 CC in the RT-PCR reactions to determine the pattern of gene expression. The
 CC gene family can be selected from a set of homeobox genes, kinase genes,
 CC protein phosphatase genes, P450 enzyme genes, steroid receptor
 CC superfamily genes or cadherin superfamily genes
 XX Sequence 20 BP; 7 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 971 TACACCGAGACCTCAAGCC 989
 Db 2 TTCACAGAGCGTCAAGCC 20
 RESULT 715
 AAZ18074
 ID AAZ18074 standard; DNA; 20 BP.
 XX AAZ18074;
 AC 11-OCT-1999 (first entry)
 XX MAP 4 gene specific primer.
 DE Genetic proximity; gene expression; cell characterisation; homeobox gene;
 KW Genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
 KW Kinase gene; protein phosphatase; P450; steroid receptor; cadherin;

KW primer; ss.
 XX Synthetic.
 OS Homo sapiens.
 XX WO9934016-A2.
 XX PD 08-JUL-1999.
 XX PF 28-DEC-1998; 98WO-IL000625.
 XX PR 29-DEC-1997; 97IL-00122793.
 PR 16-OCT-1998; 98IL-00126627.
 XX (GENE-) GENENA LTD.
 PA Vidar B;
 XX WPI; 1999-419113/35.
 DR P-PSDB; AAY14609.
 XX Identifying and characterizing cells by comparing the pattern of gene
 PT expression in a selected gene family.
 PS Claim 4; Page 41; 102pp; English.
 XX The invention provides a new method for identifying and characterising
 CC cells. The method for determining the genetic proximity of a first cell
 CC and a second cell comprises: (a) obtaining the first cell and the second
 CC cell; (b) determining in the first cell and the second cell the pattern
 CC of expression of genes in a selected gene family; and (c) calculating a
 CC proximity index using a specified formula. The methods can be used for
 CC characterising cells, e.g. for determining the origin of a cell, its
 CC genetic status, whether it carries a genetic defect, or whether it is
 CC transformed. They can be used for detecting a selected genetic defect in
 CC an individual, e.g. a fetus. They can also be used for determining the
 CC effect of a selected treatment on a test cell. They can also be used for
 CC obtaining cells capable of expressing an homeobox related desired
 CC property. The method uses reverse transcriptase polymerase chain reaction
 CC in the RT-PCR reactions to determine the pattern of gene expression in a selected
 CC gene family. Sequences AAZ17803-Z18342 represent primers that can be used
 CC in the RT-PCR reactions to determine the pattern of gene expression. The
 CC gene family can be selected from a set of homeobox genes, kinase genes,
 CC protein phosphatase genes, P450 enzyme genes, steroid receptor
 CC superfamily genes or cadherin superfamily genes
 XX Sequence 20 BP; 7 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 971 TACACCGAGACCTCAAGCC 989
 Db 2 TTCACAGAGCGTCAAGCC 20
 RESULT 716
 AAZ18077
 ID AAZ18077 standard; DNA; 20 BP.
 XX AAZ18077;
 AC 11-OCT-1999 (first entry)
 XX MAP 6 gene specific primer.
 DE Genetic proximity; gene expression; cell characterisation; homeobox gene;
 KW Genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
 KW Kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
 KW primer; ss.
 XX Synthetic.

PF 28-DEC-1998; 98WO-IL000625.
 XX
 PR 29-DEC-1997; 97IL-00122793.
 PR 16-OCT-1998; 98IL-00126627.
 XX
 PA (GENE-) GENENA LTD.
 XX
 PI Vider B;
 XX
 DR WPI; 1999-419:113/35.
 DR P-PSDB; AAY14732.
 XX
 XX Identifying and characterizing cells by comparing the pattern of gene
 PT expression in a selected gene family.
 XX
 PS Claim 4; Page 47; 102pp; English.
 XX
 CC The invention provides a new method for identifying and characterising
 CC cells. The method for determining the genetic proximity of a first cell
 CC and a second cell comprises: (a) obtaining the first cell and the second
 CC cell; (b) determining the first cell and the second cell the pattern
 CC of expression of genes in a selected gene family; and (c) calculating a
 CC proximity index using a specified formula. The methods can be used for
 CC characterising cells, e.g. for determining the origin of a cell, its
 CC genetic status, whether it carries a genetic defect, or whether it is
 CC transformed. They can be used for detecting a selected genetic defect in
 CC an individual, e.g. a fetus. They can also be used for determining the
 CC effect of a selected treatment on a test cell. They can also be used for
 CC obtaining cells capable of expressing an homeobox related desired
 CC property. The method uses reverse transcriptase polymerase chain reaction
 CC (RT-PCR) for determining the pattern of gene expression in a selected
 CC gene family. Sequences AAZ17803-Z18342 represent primers that can be used
 CC in the RT-PCR reactions to determine the pattern of gene expression. The
 CC gene family can be selected from a set of homeobox genes, kinase genes,
 CC protein phosphatase genes, P450 enzyme genes, steroid receptor
 CC superfamily genes or cadherin superfamily genes
 XX
 SQ Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 OY 971 TACACCGAGACTCAAGCC 989
 Db 2 TCACCGAGACTCAAGTC 20
 RESULT 719
 AAV70875/C
 ID AAV70875 standard; DNA; 20 BP.
 XX
 AC AAV70875;
 XX
 XX 26-FEB-1999 (first entry)
 DT
 XX
 DE PCR primer ITS3 for ITS2 region and adjacent regions.
 XX
 KW Internal transcribed spacer 2; ITS2; probe; Aspergillus flavus; A. niger;
 KW A. terreus; A. nidulans; Fusarium solani; F. moniliforme; Mucor rouxii;
 KW M. racemosus; M. plumbeus; M. indicus; A. fumigatus;
 KW M. circinilloides f. circinelloides; Rhizopus oryzae; R. microsporus;
 KW R. circinans; R. stolonifer; Rhizomucor pusillus; Absidia corymbifera;
 KW Cunninghamella elegans; Pseudallescheria boydii; Scedosporium apiospermum;
 KW Penicillium notatum; Sporothrix schenckii; filamentous fungus; PCR primer;
 KW ss.
 XX
 OS Synthetic.
 XX
 XX WO9850584-A2.
 XX
 XX 12-NOV-1998.
 PD
 XX

PF 01-MAY-1998; 98WO-US0008926.
 XX
 PR 02-MAY-1997; 97US-0045400P.
 XX
 PA (USSH) US DEPT HEALTH & HUMAN SERVICES.
 XX
 PI Morrison CJ, Reiss E, Aldorevich L, Choi JS;
 XX
 XX WPI; 1999-034737/03.
 DR
 XX New nucleic acid probes for filamentous fungi - for detecting e.g.
 PT Aspergillus, Fusarium, Mucor, Rhizopus, Rhizomucor, Absidia,
 PT Cunninghamella, Pseudallescheria boydii, Penicillium and Sporothrix
 PT species.
 XX
 PS Example 1; Page 8; 45pp; English.
 XX
 CC PCR primers AAV70875-76 and AAV83709 were used to amplify internal
 CC transcribed spacer 2 (ITS2) and adjacent regions of various filamentous
 CC fungi. Probes can be derived from the amplified sequence (see AAV70845-
 CC 73) which are species-specific, and can be used for identifying a species
 CC selected from Aspergillus flavus, A. fumigatus, A. niger, A. terreus, A.
 CC nidulans, Fusarium solani, F. moniliforme, Mucor rouxii, M. racemosus, M.
 CC plumbeus, M. indicus, M. circinilloides f. circinelloides, Rhizopus
 CC oryzae, R. microsporus, R. circinans, R. stolonifer, Rhizomucor pusillus,
 CC Absidia corymbifera, Cunninghamella elegans, Pseudallescheria boydii
 CC (teleomorph of Scedosporium apiospermum), Penicillium notatum, or
 CC Sporothrix schenckii. The probes can be used for differentiating
 CC filamentous fungal species from each other and from other medically
 CC important fungi
 XX
 SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 OY 1549 CTTGGTCTCTCGTCGATGC 1567
 Db 19 CTGGCTTCTTCATCGATGC 1
 RESULT 720
 AAX26351/C
 ID AAX26351 standard; DNA; 20 BP.
 XX
 AC AAX26351;
 XX
 XX 27-AUG-2003 (revised)
 DT
 XX 25-MAY-1999 (first entry)
 DE
 DE PCR primer 2S used to amplify DNA encoding a thrombopoietin protein.
 XX
 KW Cat; thrombopoietin; growth; growth differentiation; megakaryocyte;
 KW PCR primer; ss.
 XX
 OS Synthetic.
 OS Felis catus.
 XX
 XX JP11056368-A.
 PN
 XX
 PD 02-MAR-1999.
 XX
 XX 27-AUG-1997; 97JP-00230911.
 PF
 XX 27-AUG-1997; 97JP-00230911.
 PR
 XX (NISK) NIPPON SEIBUTSU KAGAKU KENKYUSHO ZH.
 PA
 XX WPI; 1999-222382/19.
 DR
 XX New gene and protein having of cat thrombopoietin activity - for
 XX promoting the growth and the growth differentiation of a megakaryocyte.
 PT

XX
PS Example 1; Page 4; 13pp; Japanese.
XX
CC The present sequence represents a PCR primer used to amplify nucleic acid
CC encoding a cat protein having thrombopoietin activity. The protein
CC promotes the growth and the growth differentiation of megakaryocytes.
CC (Updated on 27-AUG-2003 to correct OS field.)
XX
SQ Sequence 20 BP; 1 A; 6 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1626 AGCCCCAGCAGCGG 1644
Db 19 AGTCACAGCAGCGCAG 1

RESULT 721
AAZ03102/c
ID AAZ03102 standard; DNA; 20 BP.
AC AAZ03102;
XX
XX 07-OCT-1999 (first entry)
XX
XX PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX
XX Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
KW paratrachoma; inclusion conjunctivitis; genital disease; perihhepatitis;
KW nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;
KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
XX
XX Synthetic.
OS Chlamydia trachomatis.
XX
XX WO9928475-A2.
XX
XX 10-JUN-1999.
XX
XX 27-NOV-1998; 98WO-IB001939.
XX
XX 28-NOV-1997; 97FR-00015041.
PR 17-DEC-1997; 97FR-00016034.
PR 04-NOV-1998; 98US-0107077P.
XX
XX (GIST) GENSET.
XX
XX Griffais R;
XX
XX WPI; 1999-371125/31.
XX
XX Genome sequence of Chlamydia trachomatis.
XX
XX Disclosure; Page 1579; 1755pp; English.

PCR primers AAZ01426-Z06209 were used to amplify open reading frames (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs encode polypeptides (see AAY36754-Y37949) which can be used as vaccines against Chlamydia trachomatis. Antisense and ribozyme sequences can also be used to control growth of the microorganism. Chlamydia trachomatis is responsible for a large number of diseases, e.g. eye diseases such as conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion conjunctivitis; genital diseases such as nongonococcal urethritis, epididymitis, cervicitis, salpingitis, perihhepatitis, bartholinitis; pneumopathy in breast feeding infants; and venereal lymphogranulomatosis. The polypeptides of the invention may be of use in treating these diseases

XX
XX Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX
XX Best Local Similarity 84.2%; Pred. No. 7.3e+02;
XX
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1477 CGATCCCAAACTCCG 1495
Db 20 CGATCCCAAACTCCG 2

RESULT 723
AAZ03873
ID AAZ03873 standard; DNA; 20 BP.

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 535 AGCCCATCTTTGACAAAGC 553
Db 19 AGGTCATCTTTGAGAGC 1

RESULT 722
AAZ05087/c
ID AAZ05087 standard; DNA; 20 BP.
XX
XX AAZ05087;
AC AAZ05087;
XX
XX 07-OCT-1999 (first entry)
XX
XX PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX
XX Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
KW paratrachoma; inclusion conjunctivitis; genital disease; perihhepatitis;
KW nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;
KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
XX
XX Synthetic.
OS Chlamydia trachomatis.
XX
XX WO9928475-A2.
XX
XX 10-JUN-1999.
XX
XX 27-NOV-1998; 98WO-IB001939.
XX
XX 28-NOV-1997; 97FR-00015041.
PR 17-DEC-1997; 97FR-00016034.
PR 04-NOV-1998; 98US-0107077P.
XX
XX (GIST) GENSET.
XX
XX Griffais R;
XX
XX WPI; 1999-371125/31.
XX
XX Genome sequence of Chlamydia trachomatis.
XX
XX Disclosure; Page 1742; 1755pp; English.

PCR primers AAZ01426-Z06209 were used to amplify open reading frames (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs encode polypeptides (see AAY36754-Y37949) which can be used as vaccines against Chlamydia trachomatis. Antisense and ribozyme sequences can also be used to control growth of the microorganism. Chlamydia trachomatis is responsible for a large number of diseases, e.g. eye diseases such as conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion conjunctivitis; genital diseases such as nongonococcal urethritis, epididymitis, cervicitis, salpingitis, perihhepatitis, bartholinitis; pneumopathy in breast feeding infants; and venereal lymphogranulomatosis. The polypeptides of the invention may be of use in treating these diseases

XX
XX Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX
XX Best Local Similarity 84.2%; Pred. No. 7.3e+02;
XX
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1477 CGATCCCAAACTCCG 1495
Db 20 CGATCCCAAACTCCG 2

RESULT 723
AAZ03873
ID AAZ03873 standard; DNA; 20 BP.

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```

XX AAZ03873;
AC
DT 07-OCT-1999 (first entry)
XX
DE PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX
KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
KW paratrachoma; inclusion conjunctivitis; genital disease; perihhepatitis;
KW nongonococcal urethritis; epidymitis; cervicitis; salpingitis; PCR primer;
KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
XX
OS Synthetic.
OS Chlamydia trachomatis.
XX
PN WO9928475-A2.
XX
PD 10-JUN-1999.
XX
PF 27-NOV-1998; 98WO-IB001939.
XX
PR 28-NOV-1997; 97FR-00015041.
PR 17-DEC-1997; 97FR-00016034.
PR 04-NOV-1998; 98US-0107077P.
XX
PA (GEST ) GENSET.
PI Griffais R;
XX
DR WPI; 1999-371125/31.
XX
PT Genome sequence of Chlamydia trachomatis.
PS Disclosure; Page 1642; 1755pp; English.
XX
CC PCR primers AAZ01426-Z06209 were used to amplify open reading frames
CC (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
CC encode polypeptides (see AAY36754-Y37949) which can be used as vaccines
CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also
CC be used to control growth of the microorganism. Chlamydia trachomatis is
CC responsible for a large number of diseases, e.g. eye diseases such as
CC conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion
CC conjunctivitis; genital diseases such as nongonococcal urethritis;
CC epidymitis, cervicitis, salpingitis, perihhepatitis, bartholinitis;
CC pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.
CC The polypeptides of the invention may be of use in treating these
CC diseases
XX
SQ Sequence 20 BP; 7 A; 8 C; 2 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1281 GCCAGGCATCTGTCCAAAC 1299
Db 1 GCCAGGCATCTGTCCAAAC 19

RESULT 724
AAZ04109
ID AAZ04109 standard; DNA; 20 BP.
XX
AC AAZ04109;
XX
DT 07-OCT-1999 (first entry)
XX
DE PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX
KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
KW paratrachoma; inclusion conjunctivitis; genital disease; perihhepatitis;
KW nongonococcal urethritis; epidymitis; cervicitis; salpingitis; PCR primer;
KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.

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XX OS Synthetic.
XX OS Chlamydia trachomatis.
XX PN WO9928475-A2.
XX PD 10-JUN-1999.
XX PF 27-NOV-1998; 98WO-IB001939.
XX PR 28-NOV-1997; 97FR-00015041.
XX PR 17-DEC-1997; 97FR-00016034.
XX PR 04-NOV-1998; 98US-0107077P.
XX PA (GEST ) GENSET.
XX PI Griffais R;
XX DR WPI; 1999-371125/31.
XX PT Genome sequence of Chlamydia trachomatis.
XX PS Disclosure; Page 1661; 1755pp; English.
XX CC PCR primers AAZ01426-Z06209 were used to amplify open reading frames
XX (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
XX encode polypeptides (see AAY36754-Y37949) which can be used as vaccines
XX against Chlamydia trachomatis. Antisense and ribozyme sequences can also
XX be used to control growth of the microorganism. Chlamydia trachomatis is
XX responsible for a large number of diseases, e.g. eye diseases such as
XX conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion
XX conjunctivitis; genital diseases such as nongonococcal urethritis;
XX epidymitis, cervicitis, salpingitis, perihhepatitis, bartholinitis;
XX pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.
XX The polypeptides of the invention may be of use in treating these
XX diseases
XX
SQ Sequence 20 BP; 5 A; 2 C; 8 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 863 TGAACAGTACCTGCGATCA 881
Db 1 TGGAGCGATCTCTGGAGGA 19

RESULT 725
AAZ06548
ID AAZ06548 standard; DNA; 20 BP.
XX
AC AAZ06548;
XX
DT 23-NOV-1999 (first entry)
XX
DE Oligonucleotide primer ITS2.
XX
KW Internal transcribed spacer; ITS; ribosomal RNA; fungal pathogen; PCR;
KW primer; detection; plant disease; crop protection; ss.
XX
OS Synthetic.
XX
PN WO9942609-A1.
XX
PD 26-AUG-1999.
XX
PF 18-FEB-1999; 99WO-EP001058.
XX
PR 20-FEB-1998; 98US-00026601.
XX
PA (NOVS ) NOVARTIS AG.
PA (NOVS ) NOVARTIS-BEFINDUNGEN VERW GES MBH.

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XX Beck JJ;
 XX WPI; 1999-527487/44.
 XX
 XX New internal transcribed spacer DNA from fungal pathogens, used as
 PT sources of primers and probes for pathogen detection.
 XX
 XX Example 6; Page 18; 40pp; English.
 XX
 XX This primer was used to amplify a region of the 5.8S rRNA, the Internal
 CC Transcribed Spacer or ITS sequence. This region is highly conserved
 CC between species. The Internal Transcribed Spacer (ITS) sequences can be
 CC isolated from the ribosomal RNA gene region of fungal pathogens, such as
 CC *Pyrenophora tritici-repentis*. The ITS can then be probed for by a
 CC sequence with at least 10 contiguous nucleotides in homology with the
 CC ITS. This provides a method for detecting fungal pathogens of crops, such
 CC as wheat and maize, the sensitivity of this method allows differentiation
 CC between members of the species or genus
 XX
 XX Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1549 CTTCGGTCTTCGTCGATGC 1567
 |||||
 Db 2 CTTCGGTCTTCGTCGATGC 20
 RESULT 726
 AAZ06549/c
 ID AAZ06549 standard; DNA; 20 BP.
 XX
 XX AAZ06549;
 AC
 XX
 XX 23-NOV-1999 (first entry)
 DT
 XX
 XX Oligonucleotide primer ITS3.
 DE
 XX internal transcribed spacer; ITS; ribosomal RNA; fungal pathogen; PCR;
 KW primer; detection; plant disease; crop protection; ss.
 XX
 XX Synthetic.
 OS
 XX WO9942609-Al.
 PN
 XX
 XX 26-AUG-1999.
 PD
 XX
 XX 18-FEB-1999; 99WO-EP001058.
 PF
 XX
 XX 20-FEB-1998; 98US-00026601.
 PR
 XX (NOVS) NOVARTIS AG.
 PA (NOVS) NOVARTIS-ERFINDUNGEN VERW GES MBH.
 XX
 XX Beck JJ;
 PI
 XX WPI; 1999-527487/44.
 DR
 XX
 XX New internal transcribed spacer DNA from fungal pathogens, used as
 PT sources of primers and probes for pathogen detection.
 XX
 XX Example 6; Page 18; 40pp; English.
 XX
 XX This primer was used to amplify a region of the 5.8S rRNA, the Internal
 CC Transcribed Spacer or ITS sequence. This region is highly conserved
 CC between species. The Internal Transcribed Spacer (ITS) sequences can be
 CC isolated from the ribosomal RNA gene region of fungal pathogens, such as
 CC *Pyrenophora tritici-repentis*. The ITS can then be probed for by a
 CC sequence with at least 10 contiguous nucleotides in homology with the
 CC ITS. This provides a method for detecting fungal pathogens of crops, such
 CC as wheat and maize, the sensitivity of this method allows differentiation
 CC between members of the species or genus

CC as wheat and maize, the sensitivity of this method allows differentiation
 XX between members of the species or genus
 XX
 XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1549 CTTCGGTCTTCGTCGATGC 1567
 |||||
 Db 19 CTTCGGTCTTCGTCGATGC 1
 RESULT 727
 AAX89549
 ID AAX89549 standard; cDNA; 20 BP.
 XX
 XX AAX89549;
 AC
 XX
 XX 12-OCT-1999 (first entry)
 DT
 XX
 XX PCR primer tprb for amplification of a tpr1 fragment.
 DE
 XX PCR primer tprb; tpr1; TPR; tetratricopeptide repeat-containing protein;
 KW ss.
 XX
 XX Synthetic.
 OS
 XX Homo sapiens.
 XX
 XX US5935851-A.
 PN
 XX
 XX 10-AUG-1999.
 PD
 XX
 XX 19-JUN-1997; 97US-00879260.
 PF
 XX
 XX 20-JUN-1996; 96US-0020204P.
 PR
 XX (GEO) GEN HOSPITAL CORP.
 PA
 XX
 XX Gusella JF, Murthy AE;
 PI
 XX WPI; 1999-457606/38.
 DR
 XX
 XX Polypeptides comprising novel tetratricopeptide repeat containing genes.
 PT
 XX Example; Col 28; 34pp; English.
 PS
 XX
 XX The sequence is a PCR primer used with primer tprlc (AAX89550) to amplify
 CC genomic DNA from a human chromosome 5 deletion panel. The primer is based
 CC on positions 810 to 829 of the 3' untranslated region of tpr1 (AAX89545).
 CC The amplified fragment of tpr1 is used in the construction of plasmid
 CC vectors. tpr1 and tpr2 are novel tetratricopeptide repeat (TPR)-
 CC containing genes. It has been suggested that the product of the tpr1 gene
 CC (AAY28466) and tpr2 gene (AAY28487) may be targeted to an abnormality of
 CC protein folding. Although the genes tpr1 and tpr2 both encode TPR
 CC elements they are otherwise unrelated
 XX
 XX Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 281 CTGGGAACTTCGTTCTCC 299
 |||||
 Db 1 CTGGGAACTTCGTTCTCC 19
 RESULT 728
 AAX23562/c
 ID AAX23562 standard; DNA; 20 BP.
 XX

AC AAX23562;
XX
DT 18-JUN-1999 (first entry)
XX
DE Deletion sequence oligonucleotide 15.
XX
KW Deletion sequence oligonucleotide; sensor array; eukaryotic pathogen;
KW probe; cellular adhesion modulator; cellular proliferation modulator;
KW human retrovirus; human immunodeficiency virus; non-human retrovirus;
KW HIV; primer; ss.
XX
OS Synthetic.
XX
PN WO9911820-A1.
XX
PD 11-MAR-1999.
XX
PP 01-SEP-1998; 98WO-US018084.
XX
PR 02-SEP-1997; 97US-00923771.
XX
PS (ISIS-) ISIS PHARM INC.
XX
PI Chen D, Srivatsa GS;
XX
XX WPI; 1999-205198/17.
XX
XX New compositions comprising sensor arrays made up of unique probe
PT oligonucleotides - useful for characterizing a sample of target deletion
PT oligonucleotides.
XX
XX Example 1; Page 94; 163pp; English.
XX
CC This invention describes a novel composition comprising a number of
CC sensor arrays, where each array comprises a unique probe oligonucleotide,
CC which is the reverse complement of part of a unique target
CC oligonucleotide present in a mixture of target deletion sequence
CC oligonucleotides. The compositions form a method for characterizing a
CC sample of target deletion oligonucleotides which are labelled and
CC hybridize with the probe oligonucleotides of the sensor arrays. Such
CC oligonucleotides and their targets are represented in AAX23548-X23709.
CC Oligonucleotides characterized by the method form pharmaceutical
CC compositions that are useful for modulating cellular adhesion or
CC proliferation, and being active against a eukaryotic pathogen, a human
CC retrovirus, a human immunodeficiency virus (HIV), or a non-human
CC retrovirus, including influenza virus, Epstein-Barr virus, Respiratory
CC Syncytial virus or cytomegalovirus (CMV). The compositions enable
CC characterization of deletion sequence oligonucleotides having related,
CC but different nucleobase sequences, and quantification of different
CC species of deletion sequence ("target") oligonucleotides in a mixture.
CC Also, if the specificity of the oligonucleotide's nucleobase sequence for
CC its reverse complement is not modified, the method may be performed using
CC oligodeoxynucleotides
XX
SQ Sequence 20 BP; 0 A; 5 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATCAGAGAGATCAAC 148
DB 20 CGCAGAGAGAGAGCAAC 2

RESULT 729
AAX96453/C
ID AAX96453 standard; DNA; 20 BP.
XX
AC AAX96453;
XX
DT 13-SEP-1999 (first entry)
XX

DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.
XX
KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
KW neutralising epitope; PCR primer; ss.
XX
OS Synthetic.
OS Chlamydia pneumoniae.
XX
PN WO9927105-A2.
XX
PD 03-JUN-1999.
XX
PP 20-NOV-1998; 98WO-IB001890.
XX
PR 21-NOV-1997; 97ER-00014673.
PR 04-NOV-1998; 98US-0107078P.
XX
XX (GEST) GENSET.
PA
XX Griffais R;
PI
XX
DR WPI; 1999-357842/30.
XX
PT Genome sequence of Chlamydia pneumoniae.
XX
PS Page 1827; Disclosure; 1912pp; English.
XX
CC AAX91991-X97517 represent PCR primers used to amplify open reading frames
CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae
CC (see AAX91990). C. pneumoniae causes respiratory disease such as
CC pneumonia and bronchitis and is thought to be a contributing factor in
CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
CC nodosum or pharyngitis. The polypeptides encoded by the open reading
CC frames of the C. pneumoniae genome (see AAX34584-AAX35879) can be used
CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
CC nucleotide sequences can also be used as immunogenic compositions,
CC especially where the vector directs the expression of a neutralising
CC epitope of C. pneumoniae
XX
SQ Sequence 20 BP; 5 A; 6 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 291 TCGTTCTGCACGGGGCCCA 309
DB 20 TCGTTCTGCACGGGGGACA 2

RESULT 730
AAX27102/C
ID AAX27102 standard; DNA; 20 BP.
XX
AC AAX27102;
XX
DT 21-MAY-1999 (first entry)
XX
DE Primer for Candida Internal transcribed spacer region 2.
XX
KW Internal transcribed spacer region 2; ITS2; probe; Candida detection;
KW infection; diagnosis; probe; ss.
XX
OS Synthetic.
OS Candida sp.
XX
PN WO9906596-A1.
XX
XX 11-FEB-1999.
PD
DT 30-JUL-1998; 98WO-US015840.
XX

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PT 30-JUL-1997; 97US-00903446.
XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX Lott TJ, Elie CM, Morrison CJ, Reiss E;
XX WPI; 1999-153818/13.
XX New nucleic acid probes for Candida species - comprises a sequence which
PT hybridises with a nucleic acid molecule encoding a portion of the
PT internal transcribed spacer 2 region.
XX Example 1; Page 12; 59pp; English.
XX This sequence is a primer for a Candida internal transcribed spacer
CC region 2 (ITS2) sequence. The invention relates to a nucleic acid probe
CC for a Candida species that selectively hybridises with a nucleic acid
CC molecule encoding a portion of the ITS2, or a complementary sequence of a
CC Candida species selected from Candida guilliermondii, C. haemulonii, C.
CC kefyr, C. lambica, C. lusitanae, C. norvegensis, C. norvegica, C.
CC rugosa, C. utilis, C. vismanathii, C. zeylanoides, C. dubliniensis, and
CC C. pelliculosa. The nucleic probes can be used to detect, identify and
CC distinguish or differentiate between Candida species in a sample or
CC specimen with high sensitivity and specificity. The probes can be used to
CC detect the presence of Candida in the sample, diagnose infection with the
CC disease, quantify the amount of Candida in the sample, or monitor the
CC progress of therapies used to treat the infection. They can also be used
CC to study the organisms and related diseases and to guide therapies and
CC treatments for the diseases
XX
XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCGGTCTTCGTCGATGC 1567
DB 19 CTTCGGTCTTCGTCGATGC 1
||| ||||| |||||

RESULT 731
AAZ22586
ID AAZ22586 standard; DNA; 20 BP.
XX
XX AAZ22586;
XX 13-DEC-1999 (first entry)
XX PCR primer #2 for amplification of ITS1.
XX Internal transcribed region; ITS1; nuclear small subunit; nss; vaccine;
XX horse; equine protozoal myeloencephalitis; EPM; diagnosis;
XX therapeutic agent; prophylactic agent; parasite; cyst; PCR primer; ss.
XX Synthetic.
XX Neospora caninum.
XX WO9947927-A1.
XX 23-SEP-1999.
XX 16-MAR-1999; 99WO-US005754.
XX 16-MAR-1998; 98US-00042600.
XX (REGC ) UNIV CALIFORNIA.
XX Marsh AE, Conrad PA, Barr BC;
XX WPI; 1999-571872/48.
XX Biologically pure culture of equine Neospora, used as source of vaccines
PT

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PT and diagnostic reagents.
XX Example 3; Page 35; 47pp; English.
XX PCR primers AAZ22585-Z22586 are used to amplify the internal transcribed
CC spacer region (ITS1) of the nuclear small subunit (nss) of Neospora
CC caninum isolates (CN1 and BPA1-AAZ22584). The invention relates to a
CC biologically pure culture of equine Neospora, and the PCR product is used
CC in the identification of the culture. Immunogens (optionally expressed
CC from gene therapy vectors) from equine Neospora are used in vaccines for
CC the treatment or prevention of Neospora infection in horses and other
CC animals. Neospora is a causative agent of equine protozoal
CC myeloencephalitis (EPM). Detection of Neospora-specific antigens,
CC antibodies or nucleic acid (by usual immunoassay or hybridization tests)
CC is used for diagnosis. Antibodies specific for equine Neospora
CC are used for diagnosis; to select candidate immunogens for vaccine
CC development; to isolate proteins; to screen DNA libraries and as
CC therapeutic/prophylactic agents. Reagents specific for equine Neospora
CC allow differentiation between equine protozoal myeloencephalitis caused
CC by Neospora and Sarcocystis neurona. These pathogens require different
CC treatments and treatment of Neospora is only effective if applied before
CC the parasite has formed cysts. The vaccines also prevent shedding of
CC oocysts by animals known to be infected
XX
XX Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCGGTCTTCGTCGATGC 1567
DB 2 CTTCGGTCTTCGTCGATGC 20
||| ||||| |||||

RESULT 732
AAZ29421/C
ID AAZ29421 standard; DNA; 20 BP.
XX
XX AAZ29421;
XX 10-JUN-1999 (first entry)
XX Rat JNK1-specific oligo ISIS No: 21867.
XX Antisense oligonucleotide; Jun N-terminal kinase; JNK; hybridase; JNK1;
XX JNK2; JNK3; cell cycle progression; phosphorylation; tumour; probe; rat;
XX hyperproliferative; stress-activated protein kinase; p54; SAP; ss.
XX Synthetic.
XX Rattus norvegicus.
XX WO9909214-A1.
XX 25-FEB-1999.
XX 07-AUG-1998; 98WO-US016488.
XX 13-AUG-1997; 97US-00910629.
XX (ISIS-) ISIS PHARM INC.
XX McKay R, Dean N, Monia BP, Nero PS, Gaarde WA;
XX WPI; 1999-181060/15.
XX New antisense oligonucleotides that detect and modulate the expression of
PT Jun N-terminal kinase proteins - useful for treating hyperproliferative
PT diseases and inhibiting tumor growth in animals, and for modulating
PT protein phosphorylation by these proteins.
XX Example 7; Page 114; 190pp; English.
XX

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CC agent and for screening potential drug molecules. The new collection can
 CC be produced by standard recombinant methodology. Sequences AA07708-11
 CC represents PCR primers for cap site sequencing of human collectin

XX Sequence 20 BP; 3 A; 8 C; 1 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 595 GCCTTTGGGAACCTGAGA 613
 |||||
 Db 19 GGATTAGGGAACCTGAAGA 1

RESULT 735

AAZ95024/C

ID AAZ95024 standard; DNA; 20 BP.

XX AC AAZ95024;

XX 15-AUG-2000 (first entry)

XX Prostate cancer diagnostic marker Prol15 forward PCR primer.

XX Prostate cancer; cancer specific gene; CSG; expressed sequence tag; EST;
 KW diagnosis; monitoring; staging; imaging; therapy; metastasis; marker;
 KW human; Prol15; PCR primer; ss.

XX Homo sapiens.

XX WO200023111-A1.

XX 27-APR-2000.

XX 19-OCT-1999; 99WO-US024331.

XX 19-OCT-1998; 98US-0104737P.

XX (DIAD-) DIADEXUS LLC.

XX Salceda S, Recipon H, Cafferkey R;

XX WPI; 2000-339531/29.

XX Diagnosing, staging and monitoring the presence and metastases of
 PT prostate cancer especially useful for treating prostate cancer comprises
 PT measuring changes in cancer specific gene levels.

XX Example 2; Page 27; 74pp; English.

XX The present sequence is that of the forward primer used in the real-time
 CC quantitative PCR amplification of cancer specific gene Prol15 (see
 CC AAZ95004 and AAZ95005). Overexpression of Prol15 was found in 3 of 4
 CC primary prostate cancer samples examined, indicative of it being a
 CC diagnostic marker for prostate cancer. The invention provides ESTs and
 CC full-length contigs for CSGs (see AAZ94998-295017). The CSGs,
 CC polypeptides encoded by them, and antibodies that specifically bind CSG
 CC are used in claimed methods for detecting, diagnosing, monitoring,
 CC staging, imaging and treating prostate cancer

XX Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1500 GACACCGAGTTCTAGGCCA 1618
 |||||
 Db 19 GACCTGAGTTCTAAGGCCA 1

RESULT 736

AAZ40718/C

ID AAZ40718 standard; DNA; 20 BP.

XX AC AAZ40718;

XX 21-FEB-2000 (first entry)

XX Primer for sequencing antibody CC92 heavy chain.

XX VhalphatAG; anti-tumour associated sialylated glycoprotein antigen;

KW TAG-72; variable region; heavy chain; carcinoma; detect; tumour; ss;
 KW mouse-human chimeric antibody; therapeutic agent; intraoperative therapy;
 KW primer.

XX Synthetic.

OS Mus sp.

XX US5993813-A.

XX 30-NOV-1999.

XX 24-MAR-1997; 97US-00822028.

XX 19-OCT-1988; 88US-00259943.

XX 24-OCT-1988; 88US-00261942.

XX 19-OCT-1989; 89US-00424362.

XX 31-MAR-1993; 93US-00040887.

XX (DOWC) DOW CHEM CO.

XX Mezes PS, Gourlie BB, Schlom J, Kaplan DA, Anderson WHK;

PI Rixon MW;

XX WPI; 2000-038240/03.

XX New mouse-human chimeric antibody, useful for in vivo diagnosis of
 PT cancer.

XX Example; Col 34; 120pp; English.

XX AAZ40715-240718 are primers used to sequence the heavy chains of
 CC monoclonal antibodies directed against TAG-72, designated colon cancer
 CC (CC) antibodies. The CC antibodies are produced from the rearrangement of
 CC VhalphatAG (AAZ40701). The antibodies are used in the invention which
 CC relates to a new anti-tumour associated sialylated glycoprotein antigen
 CC (TAG)-72 mouse-human chimeric antibody. The variable region of the
 CC antibody has a heavy chain (VH) where VH is encoded by a DNA sequence
 CC homologous to the VhalphatAG germline gene. The invention includes a
 CC method for in vivo carcinoma targeting through the administration to an
 CC animal of an anti-TAG-72 mouse-human chimeric antibody produced by
 CC specific cell lines. The antibody or a fragment are conjugated to an
 CC imaging marker or therapeutic agent, in a pharmaceutically acceptable,
 CC nontoxic, sterile carrier. The chimeric antibody binds to TAG-72 which is
 CC found on certain human tumour cells. The tissue regions containing the
 CC tumours can be detected via the markers and/or can be treated via the
 CC therapeutic agents. The method is useful for in vivo diagnosis and
 CC treatment of cancer by administering to an animal an effective amount of
 CC a composition for the in situ detection of carcinoma lesions. The method
 CC is useful for intraoperative therapy, consisting of locating the position
 CC of a tumour through the administration of the antibody, followed by
 CC excising the tumour

XX Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1293 GTCCACGAGGAGTTCAG 1311
 |||||
 Db 20 GTACAATGAGAAGTTCAG 2

```
RESULT 737
AAZ72227
ID AAZ72227 standard; DNA; 20 BP.
XX AC AAZ72227;
XX DT 10-SEP-2001 (first entry)
XX DE Human biallelic marker upstream amplification primer SEQ ID NO:6583.
XX KW Human genome; biallelic marker; high density disequilibrium map;
XX KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
XX KW haplotyping; hybridisation; identification; characterisation;
XX KW amplification; single nucleotide polymorphism; SNP; PCR primer;
XX KW diagnosis; ss.
XX OS Homo sapiens.
XX PN WO9954500-A2.
XX PD 28-OCT-1999.
XX PF 21-APR-1999; 99WO-IB000822.
XX PR 21-APR-1998; 98US-0082614P.
XX PR 23-NOV-1998; 98US-0109732P.
XX PA (GEST ) GENSET.
XX PI Cohen D, Blumenfeld M, Chumakov I;
XX DR WPI; 2000-013267/01.
XX PT Novel biallelic markers used to construct a high density disequilibrium
XX PT map of the human genome.
XX PS Claim 9; Page 1634; 2745pp; English.
XX CC AA265654 to AA265978 represent human biallelic markers from the present
XX CC invention, which contain a polymorphic base at position 24 of their
XX CC nucleotide sequences. AA265979 to AA277440 represent amplification
XX CC primers for the biallelic markers. The biallelic markers of the invention
XX CC have a variety of uses: they can be used for high density mapping of the
XX CC human genome, and in complex association studies and haplotyping studies
XX CC which are useful in determining the genetic basis for disease states.
XX CC Compositions and methods of the invention can also be useful for the
XX CC identification of the targets for the development of pharmaceutical
XX CC agents and diagnostic methods, as well as the characterisation of the
XX CC differential efficacious responses to and side effects from
XX CC pharmaceutical agents acting on a disease as well as other treatment.
XX CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
XX CC 3367, are not actually given a sequence in the Sequence Listing from the
XX CC present invention
XX SQ Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 807 CATTATCCACGAGGAG 825
DB 2 CTTTATCCACACAGAGGAG 20

RESULT 738
AAZ29697/c
ID AAA29697 standard; DNA; 20 BP.
XX AC AAA29697;
XX DT 14-AUG-2000 (first entry)
XX DE VhalphatAG oligonucleotide primer SEQ ID NO:44.
XX KW Chimeric antibody; VhalphatAG; TAG-72; human; mouse; diagnosis;
XX KW tumour-associated sialylated glycoprotein antigen; cytostatic; carcinoma;
XX KW cancer; detection; therapy; primer; ds.
XX OS Homo sapiens.
XX OS Mus sp.
XX PN US6051225-A.
XX PD 18-APR-2000.
XX PF 31-MAR-1993; 93US-00040687.
XX PR 19-OCT-1988; 88US-00259943.
XX PR 24-OCT-1988; 88US-00261942.
XX PR 19-OCT-1989; 89US-00424362.
XX PA (DOWC ) DOW CHEM CO.
XX PI Anderson WHK, Kaplan DA, Schlom J, Gourlie BB, Mezes PS;
XX PI Rixon MW;
XX DR WPI; 2000-349294/30.
XX PT Novel family of chimeric antibodies for treating cancer with high
XX PT affinities to a high molecular weight tumor-associated sialylated
XX PT glycoprotein antigen of human origin.
XX PS Example; Col 34; 122pp; English.
XX CC The present invention describes an antibody (I) produced by one of the
XX CC following cell lines: CH44-1 (ATCC HB9884); CH44-2 (ATCC HB9880); CH44-4
XX CC (ATCC HB9877); CH88-1 (ATCC HB9882); CH88-2 (ATCC HB9881); CH88-3 (ATCC
XX CC HB9876); CH88-4 (ATCC HB9874); CH84-1 (ATCC HB9883); CH84-2 (ATCC HB9879)
XX CC ; CH84-3 (ATCC HB9878); and CH84-4 (ATCC HB9875); capable of binding to
XX CC tumour-associated sialylated glycoprotein (TAG)-72 with an affinity at
XX CC least 25% greater than B72.3. (I) can be used for treating and diagnosing
XX CC cancer, and for the in situ detection of carcinoma lesions and for in
XX CC vivo therapy. AA29682 to AA29744, and AA29714 to AA29723, represent
XX CC sequences used in the exemplification of the present invention
XX SQ Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1293 GTCCACGAGGAGTTCAAG 1311
DB 20 GTACAATGAGAGTTCAAG 2

RESULT 739
AAZ29714/c
ID AAA29714 standard; DNA; 20 BP.
XX AC AAA29714;
XX DT 14-AUG-2000 (first entry)
XX DE VhalphatAG oligonucleotide primer SEQ ID NO:44.
XX KW Chimeric antibody; VhalphatAG; TAG-72; human; mouse; diagnosis;
XX KW tumour-associated sialylated glycoprotein antigen; cytostatic; carcinoma;
XX KW cancer; detection; therapy; primer; ds.
XX OS Homo sapiens.
XX OS Mus sp.
XX PN US6051225-A.
XX PD 18-APR-2000.
XX PF 31-MAR-1993; 93US-00040687.
XX PR 19-OCT-1988; 88US-00259943.
XX PR 24-OCT-1988; 88US-00261942.
XX PR 19-OCT-1989; 89US-00424362.
XX PA (DOWC ) DOW CHEM CO.
XX PI Anderson WHK, Kaplan DA, Schlom J, Gourlie BB, Mezes PS;
XX PI Rixon MW;
XX DR WPI; 2000-349294/30.
XX PT Novel family of chimeric antibodies for treating cancer with high
XX PT affinities to a high molecular weight tumor-associated sialylated
XX PT glycoprotein antigen of human origin.
XX PS Example; Col 34; 122pp; English.
XX CC The present invention describes an antibody (I) produced by one of the
XX CC following cell lines: CH44-1 (ATCC HB9884); CH44-2 (ATCC HB9880); CH44-4
XX CC (ATCC HB9877); CH88-1 (ATCC HB9882); CH88-2 (ATCC HB9881); CH88-3 (ATCC
XX CC HB9876); CH88-4 (ATCC HB9874); CH84-1 (ATCC HB9883); CH84-2 (ATCC HB9879)
XX CC ; CH84-3 (ATCC HB9878); and CH84-4 (ATCC HB9875); capable of binding to
XX CC tumour-associated sialylated glycoprotein (TAG)-72 with an affinity at
XX CC least 25% greater than B72.3. (I) can be used for treating and diagnosing
XX CC cancer, and for the in situ detection of carcinoma lesions and for in
XX CC vivo therapy. AA29682 to AA29744, and AA29714 to AA29723, represent
XX CC sequences used in the exemplification of the present invention
XX SQ Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1293 GTCCACGAGGAGTTCAAG 1311
DB 20 GTACAATGAGAGTTCAAG 2

RESULT 739
AAZ29714/c
ID AAA29714 standard; DNA; 20 BP.
XX AC AAA29714;
XX DT 14-AUG-2000 (first entry)
XX DE VhalphatAG oligonucleotide primer SEQ ID NO:44.
XX KW Chimeric antibody; VhalphatAG; TAG-72; human; mouse; diagnosis;
XX KW tumour-associated sialylated glycoprotein antigen; cytostatic; carcinoma;
XX KW cancer; detection; therapy; primer; ds.
XX OS Homo sapiens.
XX OS Mus sp.
XX PN US6051225-A.
XX PD 18-APR-2000.
XX PF 31-MAR-1993; 93US-00040687.
XX PR 19-OCT-1988; 88US-00259943.
XX PR 24-OCT-1988; 88US-00261942.
XX PR 19-OCT-1989; 89US-00424362.
XX PA (DOWC ) DOW CHEM CO.
XX PI Anderson WHK, Kaplan DA, Schlom J, Gourlie BB, Mezes PS;
XX PI Rixon MW;
XX DR WPI; 2000-349294/30.
XX PT Novel family of chimeric antibodies for treating cancer with high
XX PT affinities to a high molecular weight tumor-associated sialylated
XX PT glycoprotein antigen of human origin.
XX PS Example; Col 34; 122pp; English.
XX CC The present invention describes an antibody (I) produced by one of the
XX CC following cell lines: CH44-1 (ATCC HB9884); CH44-2 (ATCC HB9880); CH44-4
XX CC (ATCC HB9877); CH88-1 (ATCC HB9882); CH88-2 (ATCC HB9881); CH88-3 (ATCC
XX CC HB9876); CH88-4 (ATCC HB9874); CH84-1 (ATCC HB9883); CH84-2 (ATCC HB9879)
XX CC ; CH84-3 (ATCC HB9878); and CH84-4 (ATCC HB9875); capable of binding to
XX CC tumour-associated sialylated glycoprotein (TAG)-72 with an affinity at
XX CC least 25% greater than B72.3. (I) can be used for treating and diagnosing
XX CC cancer, and for the in situ detection of carcinoma lesions and for in
XX CC vivo therapy. AA29682 to AA29744, and AA29714 to AA29723, represent
XX CC sequences used in the exemplification of the present invention
XX SQ Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;
```

PD 18-APR-2000.
 XX
 PF 31-MAR-1993; 93US-00040697.
 XX
 PR 19-OCT-1988; 88US-00259943.
 PR 24-OCT-1988; 88US-00261942.
 PR 19-OCT-1989; 89US-00424362.
 XX
 PA (DOWC) DOW CHEM CO.
 XX
 XX Anderson WHK, Kaplan DA, Schlom J, Gourlie BB, Mezes PS;
 PI Rixon NW;
 XX
 DR WPI; 2000-349294/30.
 XX
 XX Novel family of chimeric antibodies for treating cancer with high
 PT affinities to a high molecular weight tumor-associated sialylated
 PT glycoprotein antigen of human origin.
 XX
 PS Example; Col 37; 122pp; English.
 XX
 XX The present invention describes an antibody (I) produced by one of the
 CC following cell lines: CH44-1 (ATCC HB9884); CH44-2 (ATCC HB9880); CH44-4
 CC (ATCC HB9877); CH88-1 (ATCC HB9882); CH88-2 (ATCC HB9881); CH88-3 (ATCC
 CC HB9876); CH88-4 (ATCC HB9874); CH84-1 (ATCC HB9883); CH84-2 (ATCC HB9879)
 CC ; CH84-3 (ATCC HB9878); and CH84-4 (ATCC HB9875), capable of binding to
 CC tumour-associated sialylated glycoprotein (TAG)-72 with an affinity at
 CC least 25% greater than B72.3. (I) can be used for treating and diagnosing
 CC cancer, and for the in situ detection of carcinoma lesions and for in
 CC vivo therapy. AAA29682 to AAA29744, and AAY90714 to AAY90723, represent
 CC sequences used in the exemplification of the present invention
 XX
 XX Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 XX
 QY 1293 GTCCACGAGGAGTTCAG 1311
 DB 20 GTACAATGAGAGTTCAG 2
 XX
 RESULT 740
 AAA72056/c
 ID AAA72056 standard; DNA; 20 BP.
 XX
 AC AAA72056;
 XX
 DT 24-NOV-2000 (first entry)
 XX
 XX Japanese citrus viroid 2 gene PCR primer CB2-TM.
 DE
 XX Japanese citrus viroid 2; JCVd2; citrus viroid-I-ISS; detection;
 KW infection; citrus tree; Citrus medica; reverse transcription-PCR;
 KW RT-PCR primer; ss.
 XX
 OS citrus viroid-I-ISS.
 XX
 XX JP2000166567-A.
 PN
 XX 20-JUN-2000.
 PD
 XX 09-DEC-1998; 98JP-00349472.
 PF
 XX 09-DEC-1998; 98JP-00349472.
 PR
 XX (NORQ) NORINSUISANSO KAJU SHIKENBACHO.
 PA
 XX WPI; 2000-492947/44.
 DR
 XX Japanese citrus viroid 2 gene.
 PT
 XX

PS Example 2; Page 5; 15pp; Japanese.
 XX
 CC The invention relates to a gene (AAA72051) from Japanese citrus viroid 2
 CC (JCVd2, citrus viroid-I-ISS). The invention also encompasses the cDNA
 CC (AAA72052) of this gene, variants of the gene, primers (AAA72053-A72054)
 CC and probes specific for the gene, and a method for the detection of the
 CC gene. The JCVd2 RNA was isolated from the leaves and bark of infected
 CC Citrus medica trees. Probes of the invention may be used to detect
 CC infection by JCVd2, and therefore may be used to provide viroid free
 CC citrus seedlings. Sequences AAA72053-A72057 represent reverse
 CC transcriptions PCR (RT-PCR) primers for the amplification of the JCVd2
 CC gene or its fragments. Sequences AAA72055 and AAA72056 constitute a
 CC primer set (#2) used in an exemplification of the invention
 XX
 SQ Sequence 20 BP; 3 A; 7 C; 7 G; 3 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 XX
 QY 502 CCTGAGGCGTACTCGGAGA 520
 DB 20 CCTGAGGCGTCTCTCGGAGA 2
 XX
 RESULT 741
 AAC62964/c
 ID AAC62964 standard; DNA; 20 BP.
 XX
 AC AAC62964;
 XX
 DT 06-FEB-2001 (first entry)
 XX
 XX JNK antisense oligonucleotide ISIS #21867.
 DE
 XX Antisense; gene therapy; JNK2 protein; apoptosis; cancer;
 KW cellular hyperproliferation; Alzheimer's; Parkinson's disease;
 KW amyotrophic lateral sclerosis; retinitis; pigmentosa; epilepsy;
 KW myocardial infarction; stroke; obstructive jaundice; polycystic kidney;
 KW diabetes; Jun N-terminal kinase; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO200059549-A1.
 PN
 XX 12-OCT-2000.
 PD
 XX 04-APR-2000; 2000WO-US008880.
 PF
 XX 07-APR-1999; 99US-00287796.
 PR
 XX (ISIS-) ISIS PHARM INC.
 PA
 XX McKay R, Dean NM, Monia BP, Nero PS, Gaarde WA;
 PI
 XX WPI; 2000-638427/61.
 DR
 XX Novel methods for reducing apoptosis comprising contacting cells with
 PT antisense oligonucleotides, useful for treating apoptotic disorders, e.g.
 PT cancer.
 XX
 PS Example 8; Page 150; 160pp; English.
 XX
 CC The present invention relates to antisense oligonucleotides (AAC62844-
 CC C63000, AAA96093-A96099 and AAA07993) that hybridise specifically to a
 CC nucleotide encoding a Jun N-terminal kinase (JNK2) protein, resulting in
 CC decrease of JNK2 expression and leading to induction of apoptosis. The
 CC present sequence is one such antisense oligonucleotide. The
 CC oligonucleotides of the present invention are useful for treating
 CC diseases or conditions with reduced apoptosis, e.g. cancer and cellular
 CC hyperproliferation. The oligonucleotides may also be used to increase the
 CC stimulation of apoptotic proteins, e.g. for treating Alzheimer's or
 CC Parkinson's disease, amyotrophic lateral sclerosis, retinitis,

XX WO200058519-A2.
XX 05-OCT-2000.
XX 30-MAR-2000; 2000WO-US008440.
XX 31-MAR-1999; 99US-0127248P.
XX (WHED) WHITEHEAD INST BIOMEDICAL RES.
XX (AFFY-) AFFYMETRIX INC.
XX Altschuler D, Cargill M, Daley GQ, Ireland JS, Lander ES;
XX Lipshutz RJ, Patil N, Sklar P;
XX WPI; 2000-611722/58.
XX Nucleic acid selected from one of 106 genes comprising single nucleotide
PT polymorphisms, allele-specific oligonucleotides to the genes are useful
PT for phenotypic correlations, forensics, paternity testing, medicine and
PT genetic analysis.
XX Claim 8; Fig 5; 214pp; English.
XX The present invention is concerned with a number of human single
CC nucleotide polymorphisms (SNPs) which the inventors identified in human
CC genes. These SNPs can be used in disease diagnosis and prediction of an
CC individual's susceptibility to disease, in forensic and paternity testing
CC and in genetic mapping. In particular, the SNPs of the invention can be
CC used to diagnose susceptibility to diseases of the cardiovascular,
CC endocrine and neurological systems, such as coronary artery disease,
CC schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
CC diseases
XX Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;
PS Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 7.3e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 1449 ACATCCATCTCTCTCAGT 1467
DB 2 ACATCCATCTCTCTCAGT 20
RESULT 745
AAC72320
ID AAC72320 standard; DNA; 20 BP.
XX AC AAC72320;
XX 09-FEB-2001 (first entry)
XX Single nucleotide polymorphism PCR primer #1433.
XX Single nucleotide polymorphism; SNP; human; genetic disease;
XX disease susceptibility; cardiovascular system; endocrine system;
XX neurological system; forensic testing; paternity testing; PCR primer; ss.
XX Homo sapiens.
XX WO200058519-A2.
XX 05-OCT-2000.
XX 30-MAR-2000; 2000WO-US008440.
XX 31-MAR-1999; 99US-0127248P.
XX (WHED) WHITEHEAD INST BIOMEDICAL RES.
XX (AFFY-) AFFYMETRIX INC.
XX Altschuler D, Cargill M, Daley GQ, Ireland JS, Lander ES;

PI Lipshutz RJ, Patil N, Sklar P;
XX WPI; 2000-611722/58.
XX Nucleic acid selected from one of 106 genes comprising single nucleotide
PT polymorphisms, allele-specific oligonucleotides to the genes are useful
PT for phenotypic correlations, forensics, paternity testing, medicine and
PT genetic analysis.
XX Claim 8; Fig 5; 214pp; English.
XX The present invention is concerned with a number of human single
CC nucleotide polymorphisms (SNPs) which the inventors identified in human
CC genes. These SNPs can be used in disease diagnosis and prediction of an
CC individual's susceptibility to disease, in forensic and paternity testing
CC and in genetic mapping. In particular, the SNPs of the invention can be
CC used to diagnose susceptibility to diseases of the cardiovascular,
CC endocrine and neurological systems, such as coronary artery disease,
CC schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
CC diseases
XX Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;
PS Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 7.3e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 1449 ACATCCATCTCTCTCAGT 1467
DB 2 ACATCCATCTCTCTCAGT 20
RESULT 746
AAC72296
ID AAC72296 standard; DNA; 20 BP.
XX AC AAC72296;
XX 09-FEB-2001 (first entry)
XX Single nucleotide polymorphism PCR primer #1417.
XX Single nucleotide polymorphism; SNP; human; genetic disease;
XX disease susceptibility; cardiovascular system; endocrine system;
XX neurological system; forensic testing; paternity testing; PCR primer; ss.
XX Homo sapiens.
XX WO200058519-A2.
XX 05-OCT-2000.
XX 30-MAR-2000; 2000WO-US008440.
XX 31-MAR-1999; 99US-0127248P.
XX (WHED) WHITEHEAD INST BIOMEDICAL RES.
XX (AFFY-) AFFYMETRIX INC.
XX Altschuler D, Cargill M, Daley GQ, Ireland JS, Lander ES;
XX Lipshutz RJ, Patil N, Sklar P;
XX WPI; 2000-611722/58.
XX Nucleic acid selected from one of 106 genes comprising single nucleotide
PT polymorphisms, allele-specific oligonucleotides to the genes are useful
PT for phenotypic correlations, forensics, paternity testing, medicine and
PT genetic analysis.
XX Claim 8; Fig 5; 214pp; English.
XX The present invention is concerned with a number of human single
CC nucleotide polymorphisms (SNPs) which the inventors identified in human

CC genes. These SNPs can be used in disease diagnosis and prediction of an
 CC individual's susceptibility to disease, in forensic and paternity testing
 CC and in genetic mapping. In particular, the SNPs of the invention can be
 CC used to diagnose susceptibility to diseases of the cardiovascular,
 CC endocrine and neurological systems, such as coronary artery disease,
 CC schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
 CC diseases

XX
 SQ Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1449 ACATCCATCTCTCCCTCAGT 1467
 |||||
 Db 2 ACATCCATCTCTCCCTCAGT 20

RESULT 747

AA90638/C
 ID AAA90638 standard; DNA; 20 BP.

XX
 AC AAA90638;

XX
 DT 03-JAN-2001 (first entry)

XX
 DE 3' primer used to amplify rat trkB RNA.

XX
 XX Primer; central nervous system; CNS; buoyancy-based separation; rat;
 KW dystrophy; trkB; ss.
 XX
 XX Rattus sp.

XX
 XX WO200047718-A1.
 XX
 PD 17-AUG-2000.

XX
 PF 11-FEB-2000; 2000WO-US003596.
 XX
 PR 11-FEB-1999; 99US-0119642P.
 PR 24-SEP-1999; 99US-0158871P.

XX
 PA (SALK) SALK INST BIOLOGICAL STUDIES.
 XX
 XX Gage FH, Palmer T, Safar FF, Takahashi J, Takahashi M;
 XX WPI; 2000-558212/51.

XX
 CC Producing adult mammalian central nervous system (CNS)-derived progenitor
 CC cells or adult mammalian CNS-derived stem cells from adult mammalian CNS
 CC tissue for the treatment of ophthalmic disorders.
 XX
 PS Example 5; Page 29; 52pp; English.

XX
 CC The present invention relates to a method for obtaining adult mammalian
 CC central nervous system (CNS)-derived progenitor cells or adult mammalian
 CC CNS-derived stem cells from a cell population containing adult mammalian
 CC CNS tissue. The method involves subjecting dissociated mammalian CNS
 CC tissue to 1 or more buoyancy-based separation systems. The cells may be
 CC used to repair damaged or diseased tissue in mature mammals, particularly
 CC neuronal tissue such as retinas, in particular, the method may be used
 CC for repopulating a retina of a dystrophic animal with neurons by
 CC injecting CNS cells from a healthy donor. The present sequence is a
 CC primer used to amplify rat trkB RNA. This was used to assay the
 CC responsiveness of CNS stem cells when exposed to retinoic acid and a
 CC variety of neurotrophins

XX
 SQ Sequence 20 BP; 8 A; 5 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

XX

QY 834 CTTTGTCTTTGAGTACCTG 852
 |||||
 Db 19 CATGCTCTTTGAGTACATG 1

RESULT 748

AAS03547/C
 ID AAS03547 standard; DNA; 20 BP.

XX
 AC AAS03547;

XX
 DT 29-AUG-2001 (first entry)

XX
 DE Mouse immunoglobulin heavy chain sequencing primer B72.3/CC92 HC.

XX
 KW Mouse; antibody; TAG-72; mucin; chimaeric heavy chain; B72.3; tumour;
 KW cancer; radioimmunoguided surgery; sequencing primer; ss; B72.3/CC92 HC.

XX
 OS Mus sp.

XX
 PN US6207815-B1.

XX
 PD 27-MAR-2001.

XX
 PF 07-JUN-1995; 95US-00479285.

XX
 PR 19-OCT-1988; 88US-00259943.

XX
 PR 24-OCT-1988; 88US-00261942.

XX
 PR 19-OCT-1989; 89US-00424362.

XX
 PR 31-MAR-1993; 93US-00040687.

XX
 PA (DOWC) DOW CHEM CO.

XX
 PI Mezes PS, Gourlie BB, Rixon MW, Schlom J, Kaplan DA;
 PI Anderson WHK;

XX
 DR WPI; 2001-298946/31.

XX
 PT Novel DNA sequence encoding chimeric antibody heavy chain or its chimeric
 PT antigen-binding fragment, useful for cancer treatment, such as in vivo
 PT diagnostic assays, in vivo therapy and radioimmunoguided surgery.

XX
 PS Example; Col 34; 120pp; English.

XX
 CC The sequence is a sequencing primer for nucleic acids encoding Mouse
 CC antibody heavy chains CC92VH and B72.3, which can form chimaeric antibody
 CC molecules of the invention. The invention concerns chimaeric antibody
 CC heavy chains or their chimaeric antigen-binding fragment which have the
 CC ability to combine with anti-FAG-72 antibody light chain to form a
 CC binding site having an affinity for TAG-72 which is at least 25% greater
 CC than that of B72.3 (an antibody known to the prior art). TAG-72 is a
 CC human tumour antigen thought to be a mucin glycoprotein. DNA sequences
 CC encoding the chimaeric heavy chains are useful for producing antibodies
 CC that are useful for cancer treatment, such as in vivo diagnostic assays,
 CC in vivo therapy and radioimmunoguided surgery. The antibodies produce
 CC significantly fewer side-effects when administered to human patients

XX
 SQ Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1293 GTCCAAACGAGGAGTTCAAG 1311
 |||||
 Db 20 GTACAATGAGAGTTCAAG 2

RESULT 749

AAH46457/C
 ID AAH46457 standard; DNA; 20 BP.

XX

```
AC AAH46457;
XX
XX 14-SEP-2001 (first entry)
XX
DE Oligonucleotide #6.
XX
XX Phosphorothioate; anti-viral therapy; stereochemical pathway;
XX DNA-RNA hybrid; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= b
XX /*mod_base= OTHER
XX /*note= "All bases are phosphorothioate"
XX
XX modified_base 1
XX /*tag= a
XX /*mod_base= OTHER
XX /*note= "Modified with 2'-methoxyethyl"
XX
XX misc_RNA 4..6
XX /*tag= c
XX /*label= RNA
XX
XX misc_RNA 15..18
XX /*tag= e
XX /*label= RNA
XX
XX modified_base 15
XX /*tag= d
XX /*mod_base= OTHER
XX /*note= "Modified with 2'-methoxyethyl"
XX
XX US6242591-B1.
XX
XX 05-JUN-2001.
XX
XX 11-JAN-2000; 2000US-00481486.
XX
XX 15-OCT-1997; 97US-00950779.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Cole DL, Ravikumar VT, Chervuallath ZS;
XX
XX WPI; 2001-407218/43.
XX
XX Preparing sulfurized 2' substituted phosphorothioate oligonucleotides
XX useful in biological research, comprises phosphorylating the 5'-hydroxyl
XX of a nucleic acid having a nucleoside with a 2' modification.
XX
XX Example 9; Col 6; 7pp; English.
XX
XX The present invention relates to a method for preparing phosphorothioate
XX oligonucleotides having at least one nucleoside with a 2' modification.
XX The method comprises phosphorylating the 5'-hydroxyl of a nucleic acid
XX group having at least one nucleoside with a 2' modification in an
XX acetonitrile. The present sequence was used to illustrate the method of
XX the present invention. The method is useful for synthesizing sulphurised
XX 2' substituted phosphorothioate oligonucleotides, which may be used in
XX molecular biological research, in applications such as anti-viral
XX therapy, and for determining the stereochemical pathways of certain
XX enzymes which recognise nucleic acids
XX
XX Sequence 20 BP; 0 A; 6 C; 4 G; 4 T; 6 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 7.3e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 131 GGATGAAGAGATCAACG 149
XX | | | | | | | | | |
XX 20 GCAGAGAGAGCAACG 2
```

```
RESULT 750
AAH44591/C
ID AAH44591 standard; DNA; 20 BP.
XX
XX AAH44591;
XX
XX 01-NOV-2001 (first entry)
XX
XX Guar and locust bean seed differentiation PCR primer ITS3.
XX
XX Guar gum; locust bean gum; detection; plant; initiator; amplification;
XX PCR; Cyanopsis tetragonoloba; Ceratonia siliqua; thickener;
XX gelling agent; food stabiliser; differentiation; PCR primer; ss.
XX
XX Synthetic.
XX
XX WO200166794-A1.
XX
XX 13-SEP-2001.
XX
XX 02-MAR-2001; 2001WO-ES0000079.
XX
XX 08-MAR-2000; 2000ES-00000560.
XX
XX (CNSJ ) CONSEJO SUPERIOR INVESTIGACIONES CIENTIF.
XX (UYIS-) UNIV LAS ISLAS BALEARES.
XX (UYVA-) UNIV VALENCIA.
XX (CARO-) CAROB SA.
XX
XX Benedi Benito VJ, Domenech Sanchez A, Hernandez Viadel ML;
XX Alberti Serrano S, Rossello Picornell JA;
XX
XX WPI; 2001-565598/63.
XX
XX Differentiating between guar and locust bean seeds, or derived gums, by
XX amplifying specific, characteristic regions of ribosomal DNA.
XX
XX Claim 1; Fig 1; 4pp; Spanish.
XX
XX The present invention describes a method for differentiating between
XX seeds of Cyanopsis tetragonoloba (guar) and Ceratonia siliqua (locust
XX bean) from differences in rDNA extracted from them. The seeds are
XX germinated, DNA extracted and amplified by polymerase chain reaction
XX (PCR) using the rDNA-specific primer pairs ITS5/ITS2 (flanking the ITS
XX intervening transcribed spacer) 1 region) and ITS3/ITS4 (flanking the
XX ITS2 region). The amplicons are then detected. Also described are: (1)
XX the detection of guar gum, individually or mixed with locust bean gum, by
XX extraction of DNA, amplification by PCR and detecting amplicons
XX corresponding to guar; and (2) extraction of DNA from guar gum and/or
XX locust bean gum. The method is used to differentiate between guar and
XX locust bean seeds for their derived gums), e.g. to confirm authenticity
XX of guar gum. The gums are used as thickeners, gelling agents and
XX stabilisers in foods. The specified primers provide selective
XX identification of the different seeds. The present sequence represents
XX the ITS5 PCR primer from the present invention
XX
XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 7.3e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1549 CTTCGGTCTTCGTCGATGC 1567
XX | | | | | | | | | |
XX 19 CTGGGTTCTTCATCGATGC 1
XX
XX RESULT 751
AAH44593
ID AAH44593 standard; DNA; 20 BP.
XX
XX AAH44593;
XX
```

DT 01-NOV-2001 (first entry)
 XX
 DE Guar and locust bean seed differentiation PCR primer ITS2.
 XX
 KW Guar gum; locust bean gum; detection; plant; initiator; amplification;
 KW PCR; Cymopsis tetragonoloba; Ceratonia siliqua; thickener;
 KW gelling agent; food stabiliser; differentiation; PCR primer; ss.
 XX
 OS Synthetic.
 XX
 PN WO200166794-A1.
 XX
 PD 13-SEP-2001.
 XX
 PF 02-MAR-2001; 2001WO-ES0000079.
 XX
 PR 08-MAR-2000; 2000ES-00000560.
 XX
 PA (CNSJ) CONSEJO SUPERIOR INVESTIGACIONES CIENTIF.
 PA (UYIS-) UNIV LAS ISLAS BALEARES.
 PA (UYVA-) UNIV VALENCIA.
 PA (CARO-) CAROB SA.
 XX
 PI Benedi Benito VJ, Domenech Sanchez A, Hernandez Viadel ML;
 PI Alberti Serrano SJ, Rossello Picornell JA;
 XX
 DR WPI; 2001-565598/63.
 XX
 XX Differentiating between guar and locust bean seeds, or derived gums, by
 PT amplifying specific, characteristic regions of ribosomal DNA.
 XX
 PS Claim 1; Fig 1; 44pp; Spanish.
 XX
 CC The present invention describes a method for differentiating between
 CC seeds of Cymopsis tetragonoloba (guar) and Ceratonia siliqua (locust
 CC bean) from differences in rDNA extracted from them. The seeds are
 CC germinated, DNA extracted and amplified by polymerase chain reaction
 CC (PCR) using the rDNA-specific primer pairs ITS5/ITS2 (flanking the ITS
 CC intervening transcribed spacer) 1 region) and ITS3/ITS4 (flanking the ITS
 CC ITS2 region). The amplicons are then detected. Also described are: (1)
 CC the detection of guar gum, individually or mixed with locust bean gum, by
 CC extraction of DNA, amplification by PCR and detecting amplicons
 CC corresponding to guar; and (2) extraction of DNA from guar gum and/or
 CC locust bean gum. The method is used to differentiate between guar and
 CC locust bean seeds (or their derived gums), e.g. to confirm authenticity
 CC of guar gum. The gums are used as thickeners, gelling agents and
 CC stabilisers in foods. The specified primers provide selective
 CC identification of the different seeds. The present sequence represents
 CC the ITS5 PCR primer from the present invention
 XX
 SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1549 CTTCCGGTCTTCGCGATGC 1567
 DB |||||
 2 CTGCGTCTTCATCGATGC 20
 RESULT 752
 AAS08396
 ID AAS08396 standard; DNA; 20 BP.
 XX
 AC AAS08396;
 XX
 DT 26-SEP-2001 (first entry)
 XX
 DE Internal transcribed spacer, ITS, PCR primer ITS2.
 DE
 KW Internal transcribed spacer; ITS; PCR primer; 5.8s rDNA; fungal pathogen;
 KW wheat disease; Sharp eyespot; fungal pathotype identification; ss; ITS2.

XX
 OS Synthetic.
 XX
 PN WO200151653-A1.
 XX
 PD 19-JUL-2001.
 XX
 PF 09-JAN-2001; 2001WO-EP000172.
 XX
 PR 11-JAN-2000; 2000US-00481293.
 XX
 PA (SYGN) SYNGENTA PARTICIPATIONS AG.
 XX
 PI Beck JJ, Barnett CJ;
 XX
 DR WPI; 2001-442154/47.
 XX
 PT New internal transcribed spacer DNA sequences, useful for identifying
 PT fungal pathogen, particularly Rhizoctonia cerealis, and for monitoring
 PT disease development in plant population.
 XX
 PS Example 6; Page 16; 35pp; English.
 XX
 CC The sequence is a PCR primer used to amplify the internal transcribed
 CC spacer (ITS) from the 5.8s rDNA gene of wheat fungal pathogens. The ITS
 CC DNA sequences are useful for detecting Rhizoctonia cerealis, a fungal
 CC pathogen of wheat causing Sharp eyespot, for monitoring disease
 CC development in plant population, and for providing detailed information
 CC on the development and spread of specific pathogen races over extended
 CC geographical areas. The DNA sequences are specifically used as primers in
 CC PCR-based analysis for the identification of fungal pathotypes
 XX
 SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1549 CTTCCGGTCTTCGCGATGC 1567
 DB |||||
 2 CTGCGTCTTCATCGATGC 20
 RESULT 753
 AAS08397/C
 ID AAS08397 standard; DNA; 20 BP.
 XX
 AC AAS08397;
 XX
 DT 26-SEP-2001 (first entry)
 XX
 DE Internal transcribed spacer, ITS, PCR primer ITS3.
 XX
 KW Internal transcribed spacer; ITS; PCR primer; 5.8s rDNA; fungal pathogen;
 KW wheat disease; Sharp eyespot; fungal pathotype identification; ss; ITS3.
 XX
 OS Synthetic.
 XX
 PN WO200151653-A1.
 XX
 PD 19-JUL-2001.
 XX
 PF 09-JAN-2001; 2001WO-EP000172.
 XX
 PR 11-JAN-2000; 2000US-00481293.
 XX
 PA (SYGN) SYNGENTA PARTICIPATIONS AG.
 XX
 PI Beck JJ, Barnett CJ;
 XX
 DR WPI; 2001-442154/47.
 XX
 PT New internal transcribed spacer DNA sequences, useful for identifying

PT fungal pathogen, particularly Rhizoctonia cerealis, and for monitoring
 PT disease development in plant population.
 XX Example 6; Page 16; 35pp; English.
 XX The sequence is a PCR primer used to amplify the internal transcribed
 CC spacer (ITS) from the 5.8s rDNA gene of wheat fungal pathogens. The ITS
 CC DNA sequences are useful for detecting Rhizoctonia cerealis, a fungal
 CC pathogen of wheat causing Sharp eyespot, for monitoring disease
 CC development in plant population, and for providing detailed information
 CC on the development and spread of specific pathogen races over extended
 CC geographical areas. The DNA sequences are specifically used as primers in
 CC PCR-based analysis for the identification of fungal pathotypes
 XX
 SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1549 CTTCGGTCTTCGTCGATGC 1567
 DB 19 CTTCGGTCTTCGTCGATGC 1
 RESULT 754
 AAC91160
 ID AAC91160 standard; DNA; 20 BP.
 AC AAC91160;
 XX 20-MAR-2001 (first entry)
 DT Universal fungal internal transcribed spacer region primer #3.
 DE Fungal pathogenic; Internal Transcribed Spacer; ITS;
 KW opportunistic infection; ss.
 XX Unidentified.
 OS WO200073499-A2.
 PN 07-DEC-2000.
 PD 24-MAY-2000; 2000WO-EP004714.
 PF 28-MAY-1999; 99EP-00870109.
 PR 11-JUN-1999; 99US-0138621P.
 XX (INNO-) INNOGENETICS NV.
 PA (IRBI-) ENTERPRISE IRELAND T/A BIORESEARCH IRELA.
 XX Smith T, Maher M, Martin C, Jannes G, Rossau R, Van Der Weide M;
 WPI; 2001-061555/07.
 DR Detecting and identifying fungal pathogens, especially Candida,
 XX Cryptococcus and Aspergillus, comprises hybridizing a nucleic
 PT acid of the fungal pathogen with a probe from the internal transcribed
 PT spacer region of a DNA.
 XX Claim 3; Page 49; 59pp; English.
 XX The present invention relates to detecting and identifying fungal
 CC pathogenic species in a sample. The method involves hybridizing a nucleic
 CC acid of a fungal pathogen possibly present in the sample with at least
 CC one oligonucleotide probe, from an internal transcribed spacer (ITS)
 CC region. The method is useful for simultaneous detection and
 CC differentiation of clinically important fungi in a single assay,
 CC particularly Candida albicans, C. parapsilosis, C. tropicalis, C. kefyr,
 CC versicole, A. nidulans, A. fumigatus, C. neoformans and pneumocystis
 CC carinii. The method is especially useful in the detection of
 CC opportunistic infections in patients with impaired immunity systems, such
 CC as organ transplant patients, patients receiving intensive anticancer
 CC treatments, diabetics or AIDS patients
 XX

CC opportunistic infections in patients with impaired immunity systems, such
 CC as organ transplant patients, patients receiving intensive anticancer
 CC treatments, diabetics or AIDS patients
 XX Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1549 CTTCGGTCTTCGTCGATGC 1567
 DB 2 CTTCGGTCTTCGTCGATGC 20
 RESULT 755
 AAC91162/c
 ID AAC91162 standard; DNA; 20 BP.
 XX AAC91162;
 AC AAC91162;
 XX 20-MAR-2001 (first entry)
 DT Universal fungal internal transcribed spacer region primer #5.
 DE Fungal pathogenic; Internal Transcribed Spacer; ITS;
 KW opportunistic infection; ss.
 XX Unidentified.
 OS WO200073499-A2.
 PN 07-DEC-2000.
 PD 24-MAY-2000; 2000WO-EP004714.
 PF 28-MAY-1999; 99EP-00870109.
 PR 11-JUN-1999; 99US-0138621P.
 XX (INNO-) INNOGENETICS NV.
 PA (IRBI-) ENTERPRISE IRELAND T/A BIORESEARCH IRELA.
 XX Smith T, Maher M, Martin C, Jannes G, Rossau R, Van Der Weide M;
 WPI; 2001-061555/07.
 DR Detecting and identifying fungal pathogens, especially Candida,
 PT Cryptococcus and Aspergillus, comprises hybridizing the amplified nucleic
 PT acid of the fungal pathogen with a probe from the internal transcribed
 PT spacer region of a DNA.
 XX Claim 3; Page 49; 59pp; English.
 XX The present invention relates to detecting and identifying fungal
 CC pathogenic species in a sample. The method involves hybridizing a nucleic
 CC acid of a fungal pathogen possibly present in the sample with at least
 CC one oligonucleotide probe, from an internal transcribed spacer (ITS)
 CC region. The method is useful for simultaneous detection and
 CC differentiation of clinically important fungi in a single assay,
 CC particularly Candida albicans, C. parapsilosis, C. tropicalis, C. kefyr,
 CC C. krusei, C. glabrata, C. dubliniensis, Aspergillus flavus, A.
 CC versicole, A. nidulans, A. fumigatus, C. neoformans and pneumocystis
 CC carinii. The method is especially useful in the detection of
 CC opportunistic infections in patients with impaired immunity systems, such
 CC as organ transplant patients, patients receiving intensive anticancer
 CC treatments, diabetics or AIDS patients
 XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTGGTCTTCGTGATGC 1567
DB 19 CTGGCTTCTTCGTGATGC 1

RESULT 756
AAH46289/c
ID AAH46289 standard; DNA; 20 BP.
XX
AC AAH46289;
XX
DT 25-SEP-2001 (first entry)
XX
XX Human interferon regulatory factor-1 (IRF-1) forward RFLP PCR primer.
XX
XX Human; interferon regulatory factor-1; IRF-1; promoter; upstream region;
KW genotyping; polymorphism; hepatitis C virus; HCV infection;
KW interferon therapy efficacy; IFN; RFLP analysis;
XX restriction fragment length polymorphism; PCR primer; ss.
XX
OS Homo sapiens.
XX
XX JP2001136973-A.
XX
XX 22-MAY-2001.
XX
XX 16-NOV-1999; 99JP-00324975.
XX
XX 16-NOV-1999; 99JP-00324975.
XX
XX (SAKA) OTSUKA PHARM CO LTD.
XX
XX WPI; 2001-460211/50.
XX
XX Detection of abnormal human interferon regulatory factor-1 (IRF-1) gene.
XX
XX Example 2; Page 6; 8pp; Japanese.
XX
XX The invention relates to a method for the detection of an abnormal allele
CC of the human interferon regulatory factor-1 (IRF-1) gene. The abnormal
CC allele (AAH46293) is present in PLC/PRP/5 liver cancer cells and contains
CC a G to A substitution at position 196 of the IRF-1 promoter region.
CC (normal alleles given in AAH46293 and AAH46294). The abnormal allele
CC confers an insensitivity to the effects of interferon (IFN). In the
CC method of the invention, the presence or absence of adenine at position
CC 196 of the IRF-1 promoter is detected using procedures such as
CC restriction fragment length polymorphism (RFLP) analysis. Prior to
CC analysis, an IRF-1 gene fragment containing the polymorphic site can
CC optionally be prepared (e.g., by PCR). The invention also discloses the
CC use of IRF-1 gene fragments as probes to detect the A polymorphism. The
CC method of the invention is used to genotype a patient with hepatitis C
CC virus (HCV) infection in order to predict whether interferon therapy will
CC be effective. Sequences AAH46289-AAH46290 represent PCR primers used in
CC an exemplification of the invention to amplify wild-type and polymorphic
CC IRF-1 promoter region fragments containing the position 196 polymorphic
CC site for RFLP analysis
XX
SQ Sequence 20 BP; 4 A; 4 C; 9 G; 3 T; 0 U; 0 Other;
Query Match 0.88; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.28; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1188 GGCCACAGCGCTCCCTC 1206
DB 20 GGCCACAGCGCTCCCTC 2

RESULT 757
AAF86755/c
ID AAF86755 standard; DNA; 20 BP.
XX
AC AAF86755;

XX
DT 25-JUL-2001 (first entry)
XX
DE Human cytohesin-2 antisense oligonucleotide, SEQ ID NO:68.
XX
XX Human cytohesin-2; PSCD2; ARNO for ARF nucleotide binding site opener;
KW mSec7; ARF exchange factor; cytosolic adapter protein;
KW guanine nucleotide exchange factor; ADP ribosylation factor; ARF1; ARF3;
KW ARF6; actin cytoskeleton regulation; expression inhibition;
KW atherosclerosis; allograft rejection; hyperproliferative disorder;
KW cancer; tumour; phosphorothioate; antisense oligonucleotide; ss.
XX
XX Homo sapiens.
OS
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate linkages"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE
FT cytosines are 5-methylcytosine"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE
FT cytosines are 5-methylcytosine"
XX
XX WO200130361-A1.
XX
XX 03-MAY-2001.
XX
XX 20-OCT-2000; 2000WO-US029088.
XX
XX 27-OCT-1999; 99US-00428583.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Cowsett LM;
XX WPI; 2001-335680/35.
XX
XX New antisense compounds modulating expression of human cytohesin-2 useful
PT for diagnosis, prophylaxis and treatment of diseases associated with
PT expression of cytohesin-2, e.g. cancer, atherosclerosis, allograft
PT rejection.
XX
XX Claim 3; Page 80; 104pp; English.
XX
XX The invention relates to antisense oligonucleotides targetted to the
CC human cytohesin-2 gene, which inhibit its expression. A series of
CC oligonucleotides (AAF86697-AAF86776) were designed to target different
CC regions of the human cytohesin-2 RNA, and were analysed for their effect
CC on cytohesin-2 mRNA levels by quantitative real-time PCR. Cytohesin-2 is
CC a member of a small family of cytosolic adapter proteins which function
CC as guanine nucleotide exchange factors for ADP ribosylation factors
CC (ARFs), small monomeric G-proteins which regulate critical vesicular
CC traffic pathways. Cytohesin-2 (also known as PSCD2, ARNO for ARF
CC nucleotide binding site opener, mSec7, and ARF exchange factor) is
CC localised to the plasma membrane and promotes guanine nucleotide exchange
CC on ARF1, ARF3 and ARF6, the latter of which regulates the assembly of the
CC actin cytoskeleton. Through its interaction with ARF6, and in conjunction
CC with protein kinase C, cytohesin-2 functions as a critical link between
CC cell surface receptors and the actin cytoskeleton. The oligonucleotides
CC of the invention are useful for diagnosis, prevention and treatment of
CC conditions associated with cytohesin-2 expression, such as
CC atherosclerosis, allograft rejection and hyperproliferative disorders,
CC especially cancer
XX
XX Sequence 20 BP; 2 A; 7 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 993 GAACCTGCTCATCAACGAG 1011
|||||
Db 19 GAACCGGGGCTCATCAACGAG 1

RESULT 758
AAI69777/C
ID AAI69777 standard; DNA; 20 BP.
XX AC AAI69777;
XX 13-DEC-2001 (first entry)
DT 16S/23S rRNA spacer region PCR primer #3.
DE 16S/23S rRNA spacer region PCR primer #3.
XX Bacterium detection; 16S/23S rRNA spacer region; PCR primer; ss.
KW Pseudomonas putida.
OS JP2001190279-A.
XX 17-JUL-2001.
XX 13-JAN-2000; 2000JP-00004160.
PR 13-JAN-2000; 2000JP-00004160.
XX (MITO) MITSUBISHI JUKOGYO KK.
XX WPI; 2001-605311/69.
XX Detection method of Pseudomonas bacteria.
FT Claim 9; Page 8; 11pp; Japanese.
XX The present invention relates to a method for the detection of the
CC 16S/23S rRNA spacer region of Pseudomonas putida (see AAI69774). The
CC method can be used to detect Pseudomonas bacteria. The present sequence
CC is a PCR primer which was used in an example from the present invention
XX
SQ Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 48 ACCAGCAGTGCTGCTGCTG 66
|||||
Db 20 ACCAGCAGTGAACTGGTG 2

RESULT 759
AAH73769
ID AAH73769 standard; DNA; 20 BP.
XX AC AAH73769;
XX 06-AUG-2003 (revised)
DT 08-OCT-2001 (first entry)
XX Guignardia rRNA gene ITS2 reverse PCR primer, SEQ ID NO:6.
XX Ribosomal RNA gene; rRNA gene; internal transcribed spacer; ITS;
KW pathogenic; non-pathogenic; citrus blackspot disease; citrus fruit;
KW differentiation; characterisation; detection; PCR primer; ss.
XX Guignardia citricarpa.
OS Guignardia citricarpa.
XX

PN WO200153318-A2.
XX 26-JUL-2001.
XX 19-JAN-2001; 2001WO-US001735.
XX 19-JAN-2000; 2000US-0177013P.
XX (UYOR-) UNIV OREGON.
XX Carroll GC;
XX WPI; 2001-465362/50.
XX New differentiating oligonucleotides which hybridizes with a target DNA
FT sequence associated with pathogenic or non-pathogenic species of
FT Guignardia, for differentiating pathogenic from non-pathogenic species.
XX Claim 5; Page 18; 33pp; English.
XX The invention relates to oligonucleotide amplification primers and
CC methods for the detection of pathogenic Guignardia citricarpa. Guignardia
CC citricarpa is a fungus which causes citrus blackspot disease, producing
CC progressive black surface lesions on the fruits of most commercial citrus
CC cultivars such as oranges, lemons, limes, and grapefruit. Although this
CC is a cosmetic disease, it causes significant losses to the citrus fruit
CC growing industry, as many countries do not permit the importation of
CC affected fruit. However, there is a second, non-pathogenic Guignardia
CC species, Guignardia citricarpa, which also infects citrus fruit, but
CC which forms insignificant lesions. This non-pathogenic Guignardia species
CC is morphologically almost indistinguishable from the pathogenic
CC Guignardia citricarpa, and both species may be simultaneously present on
CC one fruit. The primers of the invention are targeted to the internal
CC transcribed spacer (ITS) regions of the ribosomal RNA gene of either the
CC pathogenic Guignardia citricarpa (see AAH73767) or the non-pathogenic
CC Guignardia citricarpa (see AAH73768). These regions exhibit significant
CC differences between the two species, and provides a means by which the
CC two species may be distinguished from one other. The present sequence
CC represents a reverse PCR primer which can be used to amplify the rRNA
CC gene ITS regions of both the pathogenic Guignardia citricarpa and the non
CC pathogenic Guignardia citricarpa. (Updated on 06-AUG-2003 to correct OS
XX field.)
SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1549 CTTCCGCTCTTCGTCGATGC 1567
|||||
Db 2 CTGCGTCTTCATCGAIGC 20

RESULT 760
AAH73770/C
ID AAH73770 standard; DNA; 20 BP.
XX AC AAH73770;
XX 06-AUG-2003 (revised)
DT 08-OCT-2001 (first entry)
XX Guignardia citricarpa rRNA gene ITS3 forward PCR primer, SEQ ID:7.
XX Ribosomal RNA gene; rRNA gene; internal transcribed spacer; ITS;
KW non-pathogenic; citrus blackspot disease; citrus fruit; differentiation;
KW characterisation; detection; PCR primer; ss.
XX Guignardia citricarpa.
OS WO200153318-A2.
XX

PD 26-JUL-2001.
XX
XX 19-JAN-2001; 2001WO-US001735.
XX
XX 19-JAN-2000; 2000US-0177013P.
XX
XX (UYOR-) UNIV OREGON.
XX
XX Carroll GC;
XX
XX WPI; 2001-465362/50.
XX
XX New differentiating oligonucleotides which hybridizes with a target DNA
XX sequence associated with pathogenic or non-pathogenic species of
XX Guignardia, for differentiating pathogenic from non-pathogenic species.
XX
XX Example I; Page 19; 33pp; English.
XX
XX The invention relates to oligonucleotide amplification primers and
XX methods for the detection of pathogenic Guignardia citricarpa. Guignardia
XX citricarpa is a fungus which causes citrus blackspot disease, producing
XX progressive black surface lesions on the fruits of most commercial citrus
XX cultivars such as oranges, lemons, limes, and grapefruit. Although this
XX is a cosmetic disease, it causes significant losses to the citrus fruit
XX growing industry, as many countries do not permit the importation of
XX affected fruit. However, there is a second, non-pathogenic Guignardia
XX species, Guignardia citricarpa, which also infects citrus fruit, but
XX which forms insignificant lesions. This non-pathogenic Guignardia species
XX is morphologically almost indistinguishable from the pathogenic
XX Guignardia citricarpa, and both species may be simultaneously present on
XX one fruit. The primers of the invention are targeted to the internal
XX transcribed spacer (ITS) regions of the ribosomal RNA gene of either the
XX pathogenic Guignardia citricarpa (see AAH73767) or the non-pathogenic
XX Guignardia citricarpa (see AAH73768). These regions exhibit significant
XX differences between the two species, and provides a means by which the
XX two species may be distinguished from one other. The present sequence
XX represents a forward PCR primer specific for the rRNA gene ITS region of
XX the non-pathogenic Guignardia citricarpa. (Updated on 06-AUG-2003 to
XX correct OS field.)
XX
XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
SQ

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1549 CTTCCGCTCTTCGTCGATGC 1567
Db 19 CTGCGTCTTCATCGATGC 1

RESULT 761
ABN85668/c
ID ABN85668 standard; DNA; 20 BP.
XX
XX ABN85668;
XX
XX 13-SEP-2002 (first entry)
XX
XX Phytophthora infestans ITS PCR primer ITS3.
XX
XX Phytophthora infestans; potato; tomato; infection; ITS;
XX internal transcribed spacer; PCR; primer; ss.
XX
XX Synthetic.
XX
XX KR2002000043-A.
XX
XX 04-JAN-2002.
XX
XX 20-JUN-2000; 2000KR-00033967.
XX
XX 20-JUN-2000; 2000KR-00033967.
XX

XX (UYKA-) UNIV KANGWON.
XX
XX Kim GS, Lee YS;
XX
XX WPI; 2002-441747/47.
XX
XX DNA marker for detecting Phytophthora infestans in potato and tomato.
XX
XX Disclosure; Fig 1; 9pp; Korean.
XX
XX The invention relates to a DNA marker for detecting Phytophthora
XX infestans in potato and tomato, useful for specifically detecting a small
XX amount of Phytophthora infestans DNA and diagnosing the infection of
XX Phytophthora infestans in potato and tomato at any time. The DNA marker
XX for Phytophthora infestans in potato and tomato is produced by extracting
XX genomic DNA of Phytophthora species, amplifying the internal transcribed
XX spacer (ITS) II region using primers ITS3 (ABN85668) and ITS4 (ABN85669),
XX cloning the amplified products into pGEM-T easy vector, preparing a
XX primer PISP-1 (ABN85670) and linking the primers PISP-1 and ITS3
XX
XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
SQ

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1549 CTTCCGCTCTTCGTCGATGC 1567
Db 19 CTGCGTCTTCATCGATGC 1

RESULT 762
ABN74847
ID ABN74847 standard; DNA; 20 BP.
XX
XX ABN74847;
XX
XX 26-JUL-2002 (first entry)
XX
XX Human caspase 2 antisense inhibitor oligonucleotide #26.
XX
XX Caspase 2; antisense; cytostatic; osteopathic; cerebroprotective;
XX neuroprotective; antilipemic; antiinflammatory; antimicrobial;
XX haematopoietic disorder; bone metabolism disorder; cholesterol disorder;
XX hyperproliferative disorder; cancer; blood disorder; stroke;
XX brain injury; neurodegenerative disease; infection; inflammation; tumour;
XX ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= a
XX /mod_base= m5c, OTHER
XX /note= "Nucleotides 1-5 and 16-20 are five-nucleotide
XX wings consisting 2'methoxyethyl (2'-MOE) nucleotides, 6-
XX 15 are 2'deoxy nucleotides, backbone linkages are
XX phosphodiester, all cytosines are 5-methylcytidines"
XX
XX WO200224720-A1.
XX
XX 28-MAR-2002.
XX
XX 14-SEP-2001; 2001WO-US028631.
XX
XX 20-SEP-2000; 2000US-00667018.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Zhang H, Watt AT;
XX
XX WPI; 2002-351998/38.
XX

XX New antisense compounds targeted to nucleic acid molecule encoding
PT caspase 2, useful for treating diseases or conditions associated with
PT caspase 2, e.g. cancer, blood disorders, stroke, brain injury and
PT neurodegenerative diseases.
XX
PS Claim 3; Page 99; 146pp; English.
XX
CC The invention relates to a compound 8-50 nucleobases in length targeted
CC to a nucleic acid molecule encoding caspase 2, which specifically
CC hybridizes with and inhibits the expression of caspase 2, or specifically
CC hybridizes with at least an 8-nucleobase portion of an active site on a
CC nucleic acid molecule encoding caspase 2. The activity of antisense
CC oligonucleotides of the invention may be described as, cytostatic,
CC osteopathic, cerebroprotective, neuroprotective, antilipemic,
CC antiinflammatory and antimicrobial. The antisense compounds are useful
CC for treating an animal having a disease or condition associated with
CC caspase 2, such as haematopoietic disorder, bone metabolism disorder,
CC cholesterol disorder, or a hyperproliferative disorder. These compounds
CC may further be used as research reagents and diagnostics, to distinguish
CC between functions of various members of a biological pathway, in the
CC treatment of a disease or disorder which can be treated by modulating the
CC expression of caspase 2, including cancer, blood disorders, stroke, brain
CC injury and neurodegenerative diseases. They may also be used for
CC prophylaxis, e.g. to prevent or delay infection, inflammation or tumour
CC formation. Records ABN74810-ABN74952 represent caspase 2 mRNA inhibitor
CC oligonucleotides
XX
SQ Sequence 20 BP; 5 A; 4 C; 9 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 235 GGTGTCGCGCAGTGACC 253
DB 2 GCGCGTCGCGCAGTGAC 20
RESULT 763
ABK99760
ID ABK99760 standard; DNA; 20 BP.
XX
AC ABK99760;
XX
DT 21-OCT-2002 (first entry)
XX
DE Mouse RAIDD antisense oligonucleotide #14.
XX
KW Antisense gene therapy; RAIDD; death domain; caspase recruitment domain;
KW CARD; hyperproliferative disorder; cancer; growth disorder; mouse;
KW metabolic disorder; infection; inflammation; tumour formation;
KW RIP associated ICH-1/CED-3-homologous protein with death domain;
KW receptor interacting protein; antisense oligonucleotide; ss.
XX
OS Mus musculus.
XX
FN WO200248314-A2.
XX
PD 20-JUN-2002.
XX
PF 29-OCT-2001; 2001WO-US050914.
XX
PR 01-NOV-2000; 2000US-00705267.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Zhang H, Freier SM, Watt AT;
XX
XX WPI; 2002-583496/52.
XX
XX Novel antisense compound that hybridizes and inhibits nucleic acid
PT encoding RAIDD which is an adaptor molecule containing both death domain

PT and caspase recruitment domains, for treating hyperproliferative
PT disorder.
XX
PS Claim 3; Page 94; 144pp; English.
XX
CC The invention describes a compound (I) 8-50 nucleobases in length
CC targeted to a nucleic acid molecule (II) encoding RAIDD which is an
CC adaptor molecule containing both death domain (DD) and caspase
CC recruitment domains (CARD), where (I) specifically hybridizes with and
CC inhibits expression of RAIDD, or specifically hybridizes with at least an
CC 8-nucleobase portion of an active site on (II). (I) is useful for
CC inhibiting the expression of RAIDD (Receptor interacting protein (RIP)
CC associated ICH-1/CED-3-homologous protein with death domain) in cells or
CC tissues, and for treating an animal having a disease or condition
CC associated with RAIDD, where the disease or condition is a
CC hyperproliferative disorder such as cancer, or a growth or metabolic
CC disorder. (I) is also useful for diagnostics, therapeutics, prophylaxis,
CC as research reagents and kits, for distinguishing functions of various
CC members of a biological pathway, and in antisense gene therapy. (I) is
CC also useful prophylactically, e.g. to prevent or delay infection,
CC inflammation or tumour formation. This sequence represents a mouse RAIDD
CC antisense oligonucleotide used to control expression of the RAIDD protein
XX
SQ Sequence 20 BP; 7 A; 4 C; 7 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 36 GTAGGCGAGGAGCCAGCA 54
DB 1 GAAGGCGAGGATGCCAGCA 19
RESULT 764
ABQ75387
ID ABQ75387 standard; DNA; 20 BP.
XX
AC ABQ75387;
XX
DT 06-NOV-2002 (first entry)
XX
DE Human RNase HII antisense oligonucleotide SEQ ID NO:20.
XX
KW RNase H; antisense technology; inhibition; antisense oligonucleotide;
KW phosphorothioate; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl gapmer with an 8 nucleotide
FT deoxy gap and a phosphorothioate backbone; cytosine
FT residues are 5-methyl cytosines"
XX
FN WO200264841-A1.
XX
PD 22-AUG-2002.
XX
PF 12-FEB-2002; 2002WO-US004243.
XX
PR 12-FEB-2001; 2001US-00781712.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke ST, Lima WF, Wu H;
XX
XX WPI; 2002-657606/70.
XX
XX Use of a mammalian, particularly human, RNase H, for treating an animal
PT with a disease or condition associated with a human RNase H, for

PT inhibiting the expression of a protein, or for reducing cellular RNA via
PT antisense technology.

Claim 38; Page 37; 70pp; English.

XX The present invention describes a method for promoting the inhibition of
XX the expression of a protein comprising employing a mammalian RNase H
XX polypeptide so that cleavage of an RNA strand of an oligonucleotide-RNA
XX complex duplex occurs. Also described is a compound 8 to 50 nucleobases
XX in length targeted to the nucleic acid encoding the human RNase HII
XX polypeptide, where the compound specifically hybridizes with and inhibits
XX the expression of a human RNase HII polypeptide. The compound, which is
XX an antisense oligonucleotide, is useful for inhibiting the expression of
XX a human RNase HII polypeptide in cells or tissues, as well as for
XX treating an animal with a disease or condition associated with a human
XX RNase HII polypeptide. The method is useful for inhibiting the expression
XX of a protein, particularly for reducing cellular RNA via antisense
XX technology. The present sequence represents a human RNase HII antisense
XX oligonucleotide, which is used in an example from the present invention
SQ Sequence 20 BP; 4 A; 12 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 553 CCCCTCAGCGCGCTCC 571
DB 1 CGCCTCAGCGCGCACACC 19

RESULT 765
ABQ75387/C
ID ABQ75387 standard; DNA; 20 BP.

XX ABQ75387;

DT 06-NOV-2002 (first entry)

XX Human RNase HII antisense oligonucleotide SEQ ID NO:20.

XX RNase H; antisense technology; inhibition; antisense oligonucleotide;
XX phosphorothioate; ss.

XX Homo sapiens.

XX Key Location/Qualifiers

FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl gapmer with an 8 nucleotide
FT decy gap and a phosphorothioate backbone; cytosine
FT residues are 5-methyl cytosines"

XX W0200264841-A1.

XX 22-AUG-2002.

XX 12-FEB-2002; 2002WO-US004243.

XX 12-FEB-2001; 2001US-00781712.

XX (ISIS-) ISIS PHARM INC.

XX Crooke ST, Lima WF, Wu H;

XX WPI; 2002-657606/70.

XX Use of a mammalian, particularly human, RNase H, for treating an animal
XX with a disease or condition associated with a human RNase H, for
XX inhibiting the expression of a protein, or for reducing cellular RNA via
XX antisense technology.

PS Claim 38; Page 37; 70pp; English.

XX The present invention describes a method for promoting the inhibition of
XX the expression of a protein comprising employing a mammalian RNase H
XX polypeptide so that cleavage of an RNA strand of an oligonucleotide-RNA
XX complex duplex occurs. Also described is a compound 8 to 50 nucleobases
XX in length targeted to the nucleic acid encoding the human RNase HII
XX polypeptide, where the compound specifically hybridizes with and inhibits
XX the expression of a human RNase HII polypeptide. The compound, which is
XX an antisense oligonucleotide, is useful for inhibiting the expression of
XX a human RNase HII polypeptide in cells or tissues, as well as for
XX treating an animal with a disease or condition associated with a human
XX RNase HII polypeptide. The method is useful for inhibiting the expression
XX of a protein, particularly for reducing cellular RNA via antisense
XX technology. The present sequence represents a human RNase HII antisense
XX oligonucleotide, which is used in an example from the present invention
SQ Sequence 20 BP; 4 A; 12 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 234 TGGTGTGGCGCGAGTGAC 252
DB 20 TGGTGTGGCGCGCTGAGGC 2

RESULT 766
ABL59026/C
ID ABL59026 standard; DNA; 20 BP.

XX ABL59026;

DT 20-AUG-2002 (first entry)

XX Nucleotide sequence of a human aurora 2 kinase inhibitor eas12.

XX Aurora 2 kinase; aurora 2 kinase inhibitor; cancer; ss.

XX Homo sapiens.

XX JP2002095479-A.

XX 02-APR-2002.

XX 22-SEP-2000; 2000JP-00287928.

XX 22-SEP-2000; 2000JP-00287928.

XX (TANB) TT PHARM INC.

XX WPI; 2002-439988/47.

XX New oligonucleotide targets and inhibits human aurora 2 kinase mRNA.

XX Claim 3; Fig 1; 12pp; Japanese.

XX The present sequence represents an oligonucleotide which targets
XX polynucleotides encoding human aurora 2 kinase. The oligonucleotide
XX inhibits aurora 2 kinase expression. The oligonucleotide is useful in the
XX diagnosis and treatment of cancers

XX Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 360 TGGGGAGAGTGACCGGCT 378
DB 19 TGGGGAAAGTGACCACTCT 1

CC gene therapy for treating cancer, osteoporosis and cardiovascular
CC diseases. The human ESR-alpha gene is located on chromosome 6. ABA89973
CC to ABA90010 represent PCR primers, and ABA90011 to ABA90037 represent
CC sequencing primers, for the human ESR-alpha gene, which are used in an
CC example from the present invention
XX
SQ Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 826 TCCTTCACCTGCTCTTGG 844
DB 1 TCCACAGCCTGCTCTTGG 19

RESULT 769
AAD39532
ID AAD39532 standard; DNA; 20 BP.
XX
AC AAD39532;
XX
DT 04-OCT-2002 (first entry)
XX
DE Human calreticulin antisense oligonucleotide, ISIS 109325.
XX
KW Human; calreticulin; antisense compound; hyperproliferative disorder;
KW cancer; autoimmune disease; viral infection; cardiovascular disease;
KW antisense therapy; cytostatic; immunosuppressive; virucide; antisense;
KW phosphorothioate backbone; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20 a
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl nucleotides"
FT modified_base 2
FT /tag= d
FT /mod_base= m5c
FT modified_base 5
FT /tag= e
FT /mod_base= m5c
FT modified_base 6..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl nucleotides"
FT modified_base 7
FT /tag= f
FT /mod_base= m5c
FT modified_base 10
FT /tag= g
FT /mod_base= m5c
FT modified_base 11
FT /tag= h
FT /mod_base= m5c
FT modified_base 16
FT /tag= i
FT /mod_base= m5c
FT modified_base 17
FT /tag= j
FT /mod_base= m5c
WO200236743-A2.
XX 10-MAY-2002.

XX
PF 30-OCT-2001; 2001WO-US049045.
XX
PR 30-OCT-2000; 2000US-00702327.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Bennett CF, Cowsert LM;
XX
DR WPI; 2002-479759/51.
XX
PT Novel antisense compound targeted to nucleic acid encoding calreticulin,
PT useful for treating a human having disease or condition associated with
PT calreticulin e.g. cancer, viral infection, autoimmune disease.
XX
PS Claim 3; Page 82; 109pp; English.
XX
CC The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of calreticulin. The compositions comprise
CC antisense compounds, particularly antisense oligonucleotides, targeted
CC to nucleic acids encoding calreticulin. The antisense compound is useful
CC for inhibiting the expression of calreticulin in human cells or tissues.
CC It is also useful for treating a human having a disease or condition
CC associated with calreticulin, e.g., hyperproliferative disorder e.g.
CC cancer, autoimmune disease, viral infection or cardiovascular disease, by
CC inhibiting expression of calreticulin. It is useful for diagnostics,
CC therapeutics, prophylaxis and as research reagents and kits. It is also
CC used in antisense therapy. The present sequence is an antisense compound
CC targeted to human calreticulin. This sequence is used to study the
CC antisense inhibition of calreticulin expression-phosphorothioate 2'-MOE
CC gapmer oligonucleotides
XX
SQ Sequence 20 BP; 2 A; 7 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 928 CAGCTGCTCCGTGGCTGG 946
DB 2 CAGCTGCTCCGTGGCTGG 20

RESULT 770
ABL4407
ID ABL4407 standard; DNA; 20 BP.
XX
AC ABL4407;
XX
DT 11-APR-2002 (first entry)
XX
DE Human chromosome 1p36-35 PCR primer SEQ ID NO:1451.
XX
KW Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
KW PCR primer; ss.
XX
OS Homo sapiens.
XX
PN JP2001321190-A.
XX
PD 20-NOV-2001.
XX
PF 12-MAR-2001; 2001JP-00068285.
XX
PR 10-MAR-2000; 2000JP-00066716.
XX
PA (RIKA) RIKAGAKU KENKYUSHO.
PA (GENO-) GENOTEX YG.
XX
DR WPI; 2002-144136/19.
XX
PT Arraying genome clones.

PS Claim 4; Page 33; 528pp; Japanese.

XX The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in multiwell plates numbered for discrimination are mixed in each of the multiwell plates; (b) a primer designed based on the chromosome marker sequence is added to the mixture to carry out an amplification reaction; (c) a signal corresponding to the marker is detected from the resultant amplified product to specify the discrimination Nos. Of the multiwell plates containing the clones having said marker sequence; (d) the order of the markers is changed so that the same discrimination Nos. succeed to the maximum in the specified discrimination Nos. to array the multiwell plates; (e) the clones in the multiwell plates of the specified discrimination Nos. are mixed respectively in each well of longitudinal and lateral directions; (f) the mixed clones are cultured and the resultant cultures are amplified by using the above primer; (g) signals are detected from the amplified products; (h) the clones in the multiwell plates are specified from the detected result; and (i) the clones are reconstituted as the positions on the chromosome and arrayed. The microarray is useful for gene analysis. ABL42957 to ABL45322 represent PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634 represent PCR primers for human chromosome 21q22.1, which are specifically claimed for use in the present invention

XX

SQ Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1526 TTCAGCTACMAAGAGGCC 1544
|||||
1 TTCAGCTAGGTGGAGGC 19

DB

RESULT 771

ABT05202

ID ABT05202 standard; DNA; 20 BP.

XX

AC ABT05202;

XX

DT 11-OCT-2002 (first entry)

XX

DE TNFR1 expression modulation related antisense oligo SEQ ID No 232.

XX

XX Antisense compound; tumour necrosis factor receptor 1; liver disease;

KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;

KW mouse; murine; ds.

XX

OS Mus sp.

XX

PN WO200248168-A1.

XX

PD 20-JUN-2002.

XX

XX 22-OCT-2001; 2001WO-US051224.

PF

XX 24-OCT-2000; 2000US-00695451.

PR

XX (ISIS-) ISIS PHARM INC.

PA

XX Baker BF, Cowseert LM, Zhang H, Dean NM;
WPI; 2002-583481/62.

XX

XX Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.

XX

XX Example 21; Page 62; 121pp; English.

PS

XX The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor

CC

receptor 1 (TNFR1), where the antisense compound inhibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a mouse oligonucleotide relating to the TNFR1 of the invention

XX

SQ Sequence 20 BP; 2 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1565 TGCTGACTCAGGAGGCC 1583
|||||
1 TGGCTGGCTCAGGAGTCC 19

DB

RESULT 772

ABK27372/c

ID ABK27372 standard; DNA; 20 BP.

XX

AC ABK27372;

XX

DT 09-APR-2002 (first entry)

XX

DE Mutant gamma-aminobutyric acid receptor GABARD subunit PCR primer #15.

XX

XX Human; Anticonvulsant; Tranquilliser; Antimanic; Antidepressant;
Nootropic; Neuroprotective; Neuroleptic; Antimigraine; Anorectic;
KW gamma-aminobutyric acid receptor subunit; GABA; epilepsy; anxiety;
KW manic depression; phobic obsessive symptom; Alzheimer's disease;
KW schizophrenia; migraine; obesity; receptor; primer; ss.

XX

OS Homo sapiens.

XX

XX WO200198486-A1.

PN

XX 27-DEC-2001.

PD

XX 20-JUN-2001; 2001WO-AU000729.

PF

XX 20-JUN-2000; 2000AU-00008260.

PR

XX 13-SEP-2000; 2000AU-00000098.

PR

XX 11-MAY-2001; 2001AU-00004953.

XX

XX (BION-) BIONOMICS LTD.

PA

XX Wallace RH, Mulley JC, Berkovic SF, Harkin LA, Dibbens LM;
WPI; 2002-122280/16.

XX

XX Mutant gamma-aminobutyric acid receptor subunits and DNA molecule, useful for diagnosing epilepsy, Alzheimer's disease, migraine, obesity, anxiety, manic depression and schizophrenia.

XX

XX Example 5; Page 52; 99pp; English.

PS

XX The invention relates to an isolated mammalian polypeptide (I), which is a mutant of gamma-aminobutyric acid (GABA) receptor subunit. The mutation disrupts the functioning of an assembled GABA receptor, its functional fragment or homologue, and creates a phenotype of epilepsy, anxiety, manic depression, phobic obsessive symptoms, Alzheimer's disease, schizophrenia, migraine and/or obesity. (I), the polynucleotide (II) encoding (I) and antibody (III) to (I) are useful in the diagnosis of epilepsy, anxiety, manic depression, phobic obsessive symptoms, Alzheimer's disease, schizophrenia, migraine and/or obesity. (III) is useful for treating the above conditions. (I)-(III) are useful in screening of candidate pharmaceutical agents, where high-throughput

CC screening techniques are employed. (II) is useful to detect and
 CC quantitate gene expression in biological samples. Oligonucleotides or
 CC longer fragments derived from (II) are useful as probes in a microarray
 CC used to monitor the expression level of large number of genes. (I)-(III)
 CC are useful for the study of the function of a GABA receptor, to study the
 CC mechanism of the disease as related to GABA receptor, for the creation of
 CC explanted mammalian cultures which express a mutant GABA receptor and for
 CC the evaluation of potential therapeutic interventions. ABK27332-ABK27399
 CC represent mutant gamma-aminobutyric acid receptor subunit coding
 CC sequences and PCR primers of the invention
 XX
 SQ Sequence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1085 AGGTGGTGACACTGTGGTA 1103
 Db 19 AGGTGGTGCCATTGCGTA 1

RESULT 773
 ABA94547
 ID ABA94547 standard; DNA; 20 BP.
 AC ABA94547;
 XX
 XX 09-APR-2002 (first entry)
 DT
 XX Mycosphaerella species ribosomal gene-specific primer ITS2.
 DE
 XX Fungal; pathogen; banana; polymerase chain reaction; Mycosphaerella;
 KW internal transcribed spacer; ITS; PCR primer; ss.
 XX
 XX Synthetic.
 OS Mycosphaerella sp.
 XX
 XX WO200196600-A2.
 FN
 XX 20-DEC-2001.

PF 15-JUN-2001; 2001WO-EP006783.
 XX
 XX 16-JUN-2000; 2000US-0211902P.
 PR
 XX (SYGN) SYNGENTA PARTICIPATIONS AG.
 PA
 XX Barnett CJ, Beck JJ;
 PI
 XX WPI; 2002-130742/17.
 DR
 XX Novel oligonucleotide primer useful for polymerase chain reaction-based
 PT detection of Mycosphaerella species, a banana fungal pathogen.
 XX
 XX Example 4; Page 23; 27pp; English.

PS The invention relates to oligonucleotide primers for use in polymerase
 XX chain reaction (PCR)-based detection of a Mycosphaerella sp., a fungal
 CC pathogen of banana. The method involves isolating DNA from a plant tissue
 CC infected with Mycosphaerella sp., amplifying a part of ITS (internal
 CC transcribed spacer) sequence using the DNA as template in PCR with the
 CC specified primer pairs and detecting Mycosphaerella sp. by visualizing
 CC the amplified part of ITS sequence. The primers enable the detection of
 CC specific isolates of fungal pathogens and the monitoring of disease
 CC development in plant populations. Sequences ABA94546-549 represent
 CC ribosomal gene-specific primers synthesised for testing in combination
 CC with the primers specific for the ITS regions
 XX
 XX Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1549 CTTCGGTCTTCGTCGATGC 1567
 Db 2 CTGCGTCTTCATCGATGC 20

RESULT 774
 ABA94548/c
 ID ABA94548 standard; DNA; 20 BP.
 XX
 XX ABA94548;
 XX
 XX 09-APR-2002 (first entry)
 DT
 XX Mycosphaerella species ribosomal gene-specific primer ITS3.
 DE
 XX Fungal; pathogen; banana; polymerase chain reaction; Mycosphaerella;
 KW internal transcribed spacer; ITS; PCR primer; ss.
 XX
 XX Synthetic.
 OS Mycosphaerella sp.
 XX
 XX WO200196600-A2.
 FN
 XX 20-DEC-2001.

PF 15-JUN-2001; 2001WO-EP006783.
 XX
 XX 16-JUN-2000; 2000US-0211902P.
 PR
 XX (SYGN) SYNGENTA PARTICIPATIONS AG.
 PA
 XX Barnett CJ, Beck JJ;
 PI
 XX WPI; 2002-130742/17.
 DR
 XX Novel oligonucleotide primer useful for polymerase chain reaction-based
 PT detection of Mycosphaerella species, a banana fungal pathogen.
 XX
 XX Example 4; Page 23; 27pp; English.

PS The invention relates to oligonucleotide primers for use in polymerase
 CC chain reaction (PCR)-based detection of a Mycosphaerella sp., a fungal
 CC pathogen of banana. The method involves isolating DNA from a plant tissue
 CC infected with Mycosphaerella sp., amplifying a part of ITS (internal
 CC transcribed spacer) sequence using the DNA as template in PCR with the
 CC specified primer pairs and detecting Mycosphaerella sp. by visualizing
 CC the amplified part of ITS sequence. The primers enable the detection of
 CC specific isolates of fungal pathogens and the monitoring of disease
 CC development in plant populations. Sequences ABA94546-549 represent
 CC ribosomal gene-specific primers synthesised for testing in combination
 CC with the primers specific for the ITS regions
 XX
 XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCGGTCTTCGTCGATGC 1567
 Db 19 CTGCGTCTTCATCGATGC 1

RESULT 775
 ABV78756/c
 ID ABV78756 standard; DNA; 20 BP.
 XX
 XX ABV78756;
 XX
 XX 14-JAN-2003 (first entry)
 DT
 XX

DE Cordyceps PCR primer ITS3.
XX Ribosome ribonucleic acid; rRNA; Cordyceps crassisporea; classification;
KW Cordyceps sinensis; ss; PCR; primer.
XX Cordyceps sp.
OS JP2002204696-A.
PN 23-JUL-2002.
PD 12-JAN-2001; 2001JP-00004805.
PF 12-JAN-2001; 2001JP-00004805.
PR 12-JAN-2001; 2001JP-00004805.
XX (HEAL-) HEALTHWAY KK.
PA (KANE/) KANESHIRO N.
XX WPI; 2002-639075/69.
XX Ribosome RNA gene base sequence of Cordyceps sinensis for classification
PT of seeds of Cordyceps sinensis.
XX Disclosure; Page 11; 33pp; Japanese.
XX The invention relates to a novel base sequence which is part of a fully
CC defined ribosome ribonucleic acid (rRNA) gene of Cordyceps crassisporea.
CC The base sequences can be used for the classification of Cordyceps
CC sinensis. The sequence represents a PCR primer used in the invention
XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 1549 CTTCGGCTTCGTCGATGC 1567
Db 19 CTGCGTTCATCGATGC 1
RESULT 776
ABV78755
ID ABV78755 standard; DNA; 20 BP.
XX AC ABV78755;
XX 14-JAN-2003 (first entry)
XX Cordyceps PCR primer ITS2.
XX Ribosome ribonucleic acid; rRNA; Cordyceps crassisporea; classification;
KW Cordyceps sinensis; ss; PCR; primer.
XX Cordyceps sp.
OS JP2002204696-A.
PN 23-JUL-2002.
PD 12-JAN-2001; 2001JP-00004805.
PF 12-JAN-2001; 2001JP-00004805.
PR (HEAL-) HEALTHWAY KK.
PA (KANE/) KANESHIRO N.
XX WPI; 2002-639075/69.
XX Ribosome RNA gene base sequence of Cordyceps sinensis for classification
PT of seeds of Cordyceps sinensis.
XX Disclosure; Page 11; 33pp; Japanese.

XX The invention relates to a novel base sequence which is part of a fully
CC defined ribosome ribonucleic acid (rRNA) gene of Cordyceps crassisporea.
CC The base sequences can be used for the classification of Cordyceps
CC sinensis. The sequence represents a PCR primer used in the invention
XX Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 1549 CTTCGGCTTCGTCGATGC 1567
Db 2 CTGCGTTCATCGATGC 20
RESULT 777
AAD34903
ID AAD34903 standard; DNA; 20 BP.
XX AC AAD34903;
XX 16-JUL-2002 (first entry)
XX Human E2F transcription factor 2 antisense oligo, ISIS #114100.
XX Human; E2F transcription factor 2; hyperproliferative disorder; cancer;
KW developmental disorder; antisense; therapy; phosphorothioate backbone;
KW cytosstatic; ss.
XX Homo sapiens.
OS Synthetic.
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT modified_base 2
FT /*tag= c
FT /mod_base= m5c
FT modified_base 4
FT /*tag= d
FT /mod_base= m5c
FT modified_base 5
FT /*tag= e
FT /mod_base= m5c
FT modified_base 8
FT /*tag= f
FT /mod_base= m5c
FT modified_base 9
FT /*tag= g
FT /mod_base= m5c
FT modified_base 10
FT /*tag= h
FT /mod_base= m5c
FT modified_base 11
FT /*tag= i
FT /mod_base= m5c
FT modified_base 14
FT /*tag= j
FT /mod_base= m5c
FT modified_base 16..20
FT /*tag= k
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT modified_base 20
FT /*tag= l

FT	/mod_base= m5c									
FN	WO2002020551-A1.									
PD	14-MAR-2002.									
PP	07-SEP-2001; 2001WO-US028202.									
PR	08-SEP-2000; 2000US-00658679.									
PA	(ISIS-) ISIS PHARM INC.									
PI	Popoff I, Wyatt JR;									
PI	WPI; 2002-329864/36.									
DR										
XX										
PT	New antisense oligonucleotides targeted to a nucleic acid encoding E2F transcription factor 2, useful for treating a disease or condition associated with E2F transcription factor 2, e.g. hyperproliferative disorders, such as cancer.									
PT										
XX	Claim 3; Page 92; 120pp; English.									
XX										
CC	The present invention relates to antisense oligonucleotides, compounds and methods for modulating the expression of E2F transcription factor 2. The antisense oligonucleotides specifically hybridize with and inhibit the expression of E2F transcription factor 2. They are useful for inhibiting the expression of E2F transcription factor 2 and for treating diseases or conditions associated with E2F transcription factor 2, such as hyperproliferative disorders, particularly cancer and developmental disorders. They may also be used as research reagents and diagnostics, to distinguish between functions of various members of a biological pathway and in the treatment of a disease or disorder which can be treated by modulating the expression of E2F transcription factor 2. The oligomeric compounds, particularly the antisense oligonucleotides may be used to modulate the function of nucleic acid molecules encoding E2F transcription factor 2, ultimately modulating the amount of E2F transcription factor produced. Sequences of the invention are also used in antisense therapy. The present DNA sequence is human E2F transcription factor 2 antisense oligonucleotide with a phosphorothioate backbone. This sequence is targeted to the coding region of human E2F transcription factor 2									
XX										
SQ	Sequence 20 BP; 1 A; 9 C; 5 G; 5 T; 0 U; 0 Other;									
<p>Query Match 0.8%; Score 14.2; DB 1; Length 20;</p> <p>Best Local Similarity 84.2%; Pred. No. 7.3e+02;</p> <p>Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;</p>										
QY	1387 CTCCTACCAAGCTGTGC 1405									
DB	2 CTCCTACCAAGCTGTGC 20									
<p>RESULT 778</p> <p>AAD38471</p> <p>ID AAD38471 standard; DNA; 20 BP.</p> <p>AC AAD38471;</p> <p>XX</p> <p>XX 10-SEP-2002 (first entry)</p> <p>XX</p> <p>XX Bovine MHC class I exon 2 amplifying PCR primer, BoC1FP-E2B.</p> <p>XX</p> <p>XX Bovine; immunological rejection; nuclear transfer; NT; immune response; MHC-I; major histocompatibility complex; embryo transfer; PCR; primer;</p> <p>KW MHC class I exon 2 DNA; ss.</p> <p>XX</p> <p>OS Bos sp.</p> <p>XX</p> <p>XX WO200229000-A2.</p> <p>FN</p> <p>XX</p> <p>XX 11-APR-2002.</p> <p>DD</p>										

PT expression of TERT, useful for modulating apoptosis and inhibiting cell
PT growth.
XX
PS Claim 26; Page 91; 154pp; English.
XX
CC The invention describes a compound, 8-50 nucleobases in length targeted
CC to a nucleic acid molecule encoding human TERT (telomerase reverse
CC transcripase), where the compound specifically hybridizes with and
CC inhibits the expression of TERT. A series of oligonucleotides were
CC designed to target different regions of the human TERT RNA. These were 20
CC nucleotides in length and composed of a central gap region consisting of
CC ten 2'-deoxynucleotides, flanked on both sides (5' and 3' directions) by
CC five-nucleotide wings. The wings were composed of 2'-methoxyethyl (2'-
CC MOE) nucleotides. The compounds were analysed for their effect on human
CC TERT mRNA levels by reverse transcriptase (RT)-polymerase chain reaction
CC (PCR). The compound is useful for inhibiting the expression of TERT in
CC cells or tissues, for treating a human having disease or condition
CC associated with TERT, for modulating apoptosis, for inhibiting cell
CC growth (preferably, cancer cell growth), in antisense therapy and for
CC diagnostics and therapeutics. This sequence is an antisense
CC oligonucleotide used to modulate the activity of nucleic acid molecules
CC encoding TERT, described in the method of the invention
XX
SQ Sequence 20 BP; 7 A; 9 C; 2 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 352 GGGTCTGATGGGAGAGTG 370
DB 20 GGGTCTGATGGTGGTACTG 2
RESULT 780
ABI95967/C
ID ABI95967 standard; DNA; 20 BP.
XX
AC ABI95967;
XX
DT 16-FEB-2002 (first entry)
XX
DE Capture oligonucleotide Zip ID#3054 oligo #9.
XX
KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
KW oncogene; tumour suppressor; human papillomavirus; forensic;
KW environmental monitoring; food industry; feed industry; ss.
XX
OS Synthetic.
XX
PN WO200179548-A2.
XX
PD 25-OCT-2001.
XX
PF 04-APR-2001; 2001WO-US010958.
XX
PR 14-APR-2000; 2000US-0197271P.
XX
PA (CORR) CORNELL RES FOUND INC.
XX
PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
XX
DR WPI; 2002-034366/04.
XX
XX Designing capture oligonucleotide probes for use on a support to which
PT complementary oligonucleotides hybridize with little mismatch.
PT
XX Example 5; Fig 29; 300pp; English.
XX
XX The present invention describes a method (M1) for designing capture
XX oligonucleotide probes (I) for use on a support to which complementary
CC

CC oligonucleotide probes (II) will hybridise with little mismatch, where
CC (I) have melting temperatures within a narrow range. The method is useful
CC for detecting infectious diseases caused by bacterial infectious agents
CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and
CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
CC Epstein-Barr virus and polio virus, and parasitic infectious agents
CC selected from Onchocerca volvulus, Entamoeba histolytica and Discusculus
CC medineis. The method is also useful for detecting genetic defects such
CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes
CC involved in DNA amplification, replication, recombination or repair, the
CC cancer is specifically associated with a gene selected from BRCA1 gene,
CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
CC method is also used for environmental monitoring, forensics and the food
CC and feed industry, detecting comprises scanning (using e.g. a scanning
CC electron microscope and infrared microscope) the support at the
CC particular sites and identifying (using a computer) identified ligation to a
CC sets occurred and correlating (using a computer) identified ligation to a
CC presence or absence of the target nucleotide sequences. ABI82074 to
CC ABI97546 represent oligonucleotide sequences used in the exemplification
CC of the present invention
XX
SQ Sequence 20 BP; 5 A; 7 C; 7 G; 1 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 922 CTGTTCCAGCTGCTCCGTG 940
DB 19 CTGCTCCGCTACTCCGTG 1
RESULT 781
ABI93287/C
ID ABI93287 standard; DNA; 20 BP.
XX
AC ABI93287;
XX
DT 15-FEB-2002 (first entry)
XX
DE Capture oligonucleotide Zip ID#374 oligo #9.
XX
KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
KW oncogene; tumour suppressor; human papillomavirus; forensic;
KW environmental monitoring; food industry; feed industry; ss.
XX
OS Synthetic.
XX
PN WO200179548-A2.
XX
PD 25-OCT-2001.
XX
PF 04-APR-2001; 2001WO-US010958.
XX
PR 14-APR-2000; 2000US-0197271P.
XX
PA (CORR) CORNELL RES FOUND INC.
XX
PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
XX
DR WPI; 2002-034366/04.
XX
XX Designing capture oligonucleotide probes for use on a support to which
PT complementary oligonucleotides hybridize with little mismatch.
PT
XX Example 5; Fig 29; 300pp; English.
XX
XX The present invention describes a method (M1) for designing capture
XX oligonucleotide probes (I) for use on a support to which complementary
CC

oligonucleotide probes (II) will hybridize with little mismatch, where (I) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal infectious agents e.g. Cryptococcus neoformans, Candida albicans and Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus, Epstein-Barr virus and polio virus, and parasitic infectious agents selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus medinensis. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects. Detecting cancer involving oncogenes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCA1 Gene, p53 gene, human papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the particular sites and identifying if ligation of the oligonucleotide probe sets occurred and correlating (using a computer) identified ligation to a presence or absence of the target nucleotide sequences. AB182074 to CC AB197546 represent oligonucleotide sequences used in the exemplification of the present invention

XX
SQ Sequence 20 BP; 2 A; 7 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 999 GTCATCATCAGACGAGCGGA 1017
|||||
DB 19 GTCATCATCAGACGAGCGGA 1

RESULT 782
AB193148/C
ID AB193148 standard; DNA; 20 BP.
XX
AC AB193148;
XX
DT 15-FEB-2002 (first entry)
XX
DE Capture oligonucleotide Zip ID#235 oligo #9.
XX
KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
KW oncogene; tumour suppressor; human papillomavirus; forensic;
KW environmental monitoring; food industry; feed industry; ss.
XX
OS Synthetic.
XX
XX WO200179548-A2.
XX
XX 25-OCT-2001.
XX
XX 04-APR-2001; 2001WO-US010958.
XX
XX 14-APR-2000; 2000US-0197271P.
XX
XX (CORR) CORNELL RES FOUND INC.
XX
XX Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
XX
XX WPI; 2002-034366/04.
XX

Designing capture oligonucleotide probes for use on a support to which complementary oligonucleotides hybridize with little mismatch.

XX
PS Example 5; Fig 29; 30pp; English.

The present invention describes a method (M1) for designing capture oligonucleotide probes (I) for use on a support to which complementary

oligonucleotide probes (II) will hybridize with little mismatch, where (I) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal infectious agents e.g. Cryptococcus neoformans, Candida albicans and Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus, Epstein-Barr virus and polio virus, and parasitic infectious agents selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus medinensis. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects. Detecting cancer involving oncogenes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCA1 Gene, p53 gene, human papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the particular sites and identifying if ligation of the oligonucleotide probe sets occurred and correlating (using a computer) identified ligation to a presence or absence of the target nucleotide sequences. AB182074 to CC AB197546 represent oligonucleotide sequences used in the exemplification of the present invention

XX
SQ Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1121 TGCTTGGTTCACGGACTA 1139
|||||
DB 19 TGCTTGGTTCACGGACGA 1

RESULT 783
ABQ87695
ID ABQ87695 standard; DNA; 20 BP.
XX
AC ABQ87695;
XX
DT 18-SEP-2002 (first entry)
XX
DE Human ESR1 exon 1G reverse PCR primer.
XX
KW Human; oestrogen; receptor; oestrogen receptor alpha; cytostatic;
KW osteopathic; cardiant; cancer; osteoporosis; cardiovascular disorder;
KW ESR-alpha; ESR1; PCR; primer; ss.
XX
OS Homo sapiens.
XX
XX WO200234945-A2.
XX
XX 02-MAY-2002.
XX
XX 21-AUG-2001; 2001WO-US025990.
XX
XX 20-OCT-2000; 2000US-00692414.
XX
XX 24-JAN-2001; 2001US-00768184.
XX
XX 13-MAR-2001; 2001US-00804076.
XX
XX 05-APR-2001; 2001US-00826314.
XX
XX (APPL-) APPLERA CORP.
XX
XX Kalush F, Cassel MJ, Hwang SS, Winn-deen ES;
XX
XX WPI; 2002-479722/51.
XX

Peptide of estrogen receptor alpha genes variant or its fragment for use in identifying modulators for treating disorders e.g. a susceptibility to cancer, osteoporosis, cardiovascular disorder.

Example 1; Fig 2D; 352pp; English.

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory lung or allergic disease or condition also.

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airflow dysfunction and a polypeptide associated with lung and/or nasal airflow dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 2 A; 4 C; 7 G; 7 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 623 ACCTGACAACTGGCGA 641
 Db 19 ACCTGACAACTGGCGCA 1
 RESULT 786
 ABZ85420/c
 ID ABZ85420 standard; DNA; 20 BP.
 XX AC ABZ85420;
 XX DT 17-OCT-2003 (first entry)
 XX DE Human oligonucleotide sequence.
 XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX OS Homo sapiens.
 XX PN WO200285308-A2.
 XX PD 31-OCT-2002.
 XX PF 23-APR-2002; 2002WO-US013135.
 XX PR 24-APR-2001; 2001US-0286137P.
 XX PA (EPIG-) EPIGENESIS PHARM INC.
 XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-229219/22.
 XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX
 PS Claim 15; SEQ ID NO 662; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 4 A; 7 C; 8 G; 1 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1029 GGCTGACCTTGGCGCTGGCC 1047
 Db 19 GGCTGACCTTGGCGCTGGCC 1
 RESULT 787
 ABZ85267/c
 ID ABZ85267 standard; DNA; 20 BP.
 XX AC ABZ85267;
 XX DT 17-OCT-2003 (first entry)
 XX DE Human oligonucleotide sequence.
 XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX OS Homo sapiens.
 XX PN WO200285308-A2.
 XX PD 31-OCT-2002.
 XX PF 23-APR-2002; 2002WO-US013135.
 XX PR 24-APR-2001; 2001US-0286137P.
 XX PA (EPIG-) EPIGENESIS PHARM INC.
 XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-229219/22.
 XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX
 PS Claim 15; SEQ ID NO 509; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1403 TGCAGTTTGAGGTCGAAA 1421
 |||||
 DB 19 TGCACCTTGAGGCGCCAA 1

RESULT 788

ABZ84777/C
 ID ABZ84777 standard; DNA; 20 BP.

XX AC ABZ84777;

XX DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX PS Claim 15; SEQ ID NO 19; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 993 GAACCTGCTCATCAAGAG 1011
 |||||
 DB 19 GAACCTGCTCATCTCCAAG 1

RESULT 789

ABZ87947

ID ABZ87947 standard; DNA; 20 BP.

XX AC ABZ87947;

XX DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX PS Disclosure; SEQ ID NO 3189; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 10 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1008 CGAGAGGGGAGAGCTCAAG 1026
DB 1 CGAGAGAGAGAGATCAAG 19

RESULT 790
ABZ87022/c
ID ABZ87022 standard; DNA; 20 BP.
XX
AC ABZ87022;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.
XX
XX 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX
DR WPI; 2003-229219/22.

XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.

XX Claim 15; SEQ ID NO 2264; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 7 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1394 CCAGCTGTTGAGTTGA 1412
DB 19 CCAGCTGATGTACTTTGA 1

RESULT 791
ABZ88149/c
ID ABZ88149 standard; DNA; 20 BP.
XX
AC ABZ88149;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.
XX
XX 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX
DR WPI; 2003-229219/22.

XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.

XX Disclosure; SEQ ID NO 3391; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 3 A; 3 C; 8 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 994 AACCTGCTCATCAGAGA 1012
DB 19 ACCCTGCTCATCAGAGA 1

RESULT 792
ABZ87509/C
ID ABZ87509 standard; DNA; 20 BP.
XX AC ABZ87509;
XX DT 17-OCT-2003 (first entry)
XX DE Human oligonucleotide sequence.
XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX OS Homo sapiens.
XX PN WO200285308-A2.
XX PD 31-OCT-2002.
XX PF 23-APR-2002; 2002WO-US013135.
XX PR 24-APR-2001; 2001US-0286137P.
XX PA (EPIG-) EPIGENESIS PHARM INC.
XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shanabuddin S;
XX WPI; 2003-229219/22.
XX PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX PS Disclosure; SEQ ID NO 2751; 872pp; English.
XX CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 2 A; 6 C; 2 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 715 CTGGAACATGAAGAGGGG 733
DB 20 CTGGAACATGAAGAAAGAG 2

RESULT 793
ABV77015/C
ID ABV77015 standard; DNA; 20 BP.
XX AC ABV77015;
XX DT 03-MAR-2003 (first entry)
XX DE Primer ITS3 used to amplify fungal nuclear rDNA ITS region.
XX KW Internal transcribed spacer region; ITS region; fungal pathogen;
KW Colletotrichum acutatum; Alternaria; Cladosporium carpophilum; PCR;
XX primer; ss.
XX OS Synthetic.
XX PN WO200277293-A2.
XX PD 03-OCT-2002.
XX PF 08-MAR-2002; 2002WO-EP002581.
XX PR 09-MAR-2001; 2001US-0274540P.
XX PR 24-AUG-2001; 2001US-00939379.
XX PA (SYGN) SYNGENTA PARTICIPATIONS AG.
XX PI Beck JJ, Barnett CJ, Perry CV;
XX WPI; 2003-092859/08.
XX PT New internal transcribed spacer-derived oligonucleotide primer useful for
PT detecting fungal pathogens such as Colletotrichum acutatum, Alternaria
PT spp. or Cladosporium carpophilum.
XX PS Example 6; Page 20; 51pp; English.
XX CC PCR primers ABV77013-16 represent conserved primers designed for
CC amplification of the fungal nuclear ribosomal RNA internal transcribed
CC spacer (ITS) region. The primers are useful for detecting a fungal
CC pathogen such as Colletotrichum acutatum, Alternaria spp. or Cladosporium
CC carpophilum. The primers are useful for detecting specific isolates of
CC fungal pathogens and for monitoring disease development in plant
CC populations, for assessing potential damage in a specific crop
CC on the development and spread of specific pathogen races over extended
CC geographical areas, and for detecting diseases with long latent phase
XX
SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCGGTCTTCGTCGATGC 1567
 Db 19 CTGCGTCTTCATCGATGC 1

RESULT 794
 ABV77014
 ID ABV77014 standard; DNA; 20 BP.
 AC ABV77014;
 XX
 XX
 DT 03-MAR-2003 (first entry)
 XX
 DE Primer ITS2 used to amplify fungal nuclear rDNA ITS region.
 XX
 KW Internal transcribed spacer region; ITS region; fungal pathogen;
 KW Colletotrichum acutatum; Alternaria; Cladosporium carpophilum; PCR;
 KW primer; ss.
 XX
 OS Synthetic.
 XX
 XX W020027293-A2.
 PN
 XX
 PD 03-OCT-2002.
 XX
 PF 08-MAR-2002; 2002WO-EP002581.
 XX
 XX 09-MAR-2001; 2001US-0274540P.
 PR 24-AUG-2001; 2001US-00939379.
 XX
 XX (SYGN) SYNGENTA PARTICIPATIONS AG.
 PA
 XX Beck JJ, Barnett CJ, Perry CV;
 PI WPI; 2003-092859/08.
 XX
 DR New internal transcribed spacer-derived oligonucleotide primer useful for
 PT detecting fungal pathogens such as Colletotrichum acutatum, Alternaria
 PT spp. or Cladosporium carpophilum.
 XX
 XX Example 6; Page 20; 51pp; English.

PCR primers ABV77013-16 represent conserved primers designed for
 CC amplification of the fungal nuclear ribosomal RNA internal transcribed
 CC spacer (ITS) region. The primers are useful for detecting a fungal
 CC pathogen such as Colletotrichum acutatum, Alternaria spp. or Cladosporium
 CC carpophilum. The primers are useful for detecting specific isolates of
 CC fungal pathogens and for monitoring disease development in plant
 CC populations, for assessing potential damage in a specific crop
 CC variety/pathogen strain relationship, for providing detailed information
 CC on the development and spread of specific pathogen races over extended
 CC geographical areas, and for detecting diseases with long latent phase

XX Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCGGTCTTCGTCGATGC 1567
 Db 2 CTGCGTCTTCATCGATGC 20

RESULT 795
 ACA61050
 ID ACA61050 standard; DNA; 20 BP.
 XX
 AC ACA61050;
 XX
 DT 14-JUL-2003 (first entry)
 XX

XX Guignardia internal transcribed spacer (ITS) reverse primer #2.
 DE
 XX Guignardia; pathogen; internal transcribed spacer; ITS; citrus fruit;
 KW intergenic sequence; intronic sequence; calmodulin; chitin synthase;
 KW citrus blackspot; PCR; primer; ss.
 XX
 OS Guignardia sp.
 XX
 PN W02003031933-A2.
 XX
 PD 17-APR-2003.
 XX
 PF 09-OCT-2002; 2002WO-US032227.
 XX
 PR 09-OCT-2001; 2001US-0327982P.
 XX
 PA (UYOR-) UNIV OREGON.
 XX
 PI Carroll GC;
 XX
 DR WPI; 2003-372133/35.
 XX
 XX Differentiating pathogenic and non-pathogenic Guignardia sp., by
 PT assessing hybridization between DNA from Guignardia- infected citrus and
 PT probes based on intronic sequences from calmodulin and chitin synthase
 PT genes.
 XX
 PS Example 1; Page 19; 37pp; English.

The invention describes a method of differentiating pathogenic and non-
 CC pathogenic species of Guignardia (I). The method comprises obtaining a
 CC DNA sample from a citrus fruit infected with (I), immobilising the DNA,
 CC probing the immobilised DNA with a probe based on intergenic sequences
 CC and intronic sequences from within the calmodulin and chitin synthase
 CC genes, and demonstrating hybridisation with the probes to represent the
 CC pathogenic species and non-pathogenic species. The method is specific,
 CC rapid and useful for differentiating pathogenic species (e.g. Guignardia
 CC citricarpa, the causative agent of citrus blackspot) from non-pathogenic
 CC species of Guignardia. This sequence represents a primer used to isolate
 CC an internal transcribed spacer to allow characterisation of pathogenic
 CC Guignardia

XX Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCGGTCTTCGTCGATGC 1567
 Db 2 CTGCGTCTTCATCGATGC 20

RESULT 796
 ACA61051/C
 ID ACA61051 standard; DNA; 20 BP.
 XX
 AC ACA61051;
 XX
 DT 14-JUL-2003 (first entry)
 XX
 DE Guignardia internal transcribed spacer (ITS) forward primer #3.
 XX
 KW Guignardia; pathogen; internal transcribed spacer; ITS; citrus fruit;
 KW intergenic sequence; intronic sequence; calmodulin; chitin synthase;
 KW citrus blackspot; PCR; primer; ss.
 XX
 OS Guignardia sp.
 XX
 PN W02003031933-A2.
 XX
 DT 17-APR-2003.

XX 09-OCT-2002; 2002WO-US032227.
 XX PA (LIVE/) LIVETT B.
 XX PA (KHAL/) KHALIL Z.
 XX PA (GAYL/) GAYLER K.
 XX PA (DOWN/) DOWN J.
 XX PI Livett B, Khalil Z, Gayler K, Down J;
 XX PI WPI; 2003-103260/09.
 XX DR
 XX DR
 XX DR
 XX PT New alpha- conotoxin-like peptides that inhibit the activity of neuronal
 XX PT nicotinic acetylcholine receptor, useful for treating stroke, pain,
 XX PT schizophrenia, Parkinson's disease, small cell lung carcinoma or
 XX PT Alzheimer's disease.
 XX PS
 XX PS Claim 18; Page 31; 87pp; English.
 XX CC The invention relates to an isolated alpha-conotoxin-like peptide
 XX CC sequence. The activity of peptides of the invention may be described as
 XX CC cerebrotective, analgesic, anticonvulsant, neuroleptic,
 XX CC antiparkinsonian, cytostatic, nootropic and neuroprotective. Peptides of
 XX CC the invention are neuronal nicotinic acetylcholine receptor (nAChR)
 XX CC inhibitors. The alpha-conotoxin-like peptide is useful for treating a
 XX CC condition mediated by a neuronal nicotinic acetylcholine receptor, e.g.
 XX CC stroke, pain (e.g. cancer related pain, post-surgical pain, oral or
 XX CC dental pain, referred trigeminal neuralgia, post-herpetic neuralgia,
 XX CC phantom limb pain, fibromyalgia, reflex sympathetic dystrophy, pain
 XX CC associated with inflammatory conditions, rheumatoid arthritis or
 XX CC inflammatory arthritis, or pain resulting from conditions associated with
 XX CC neurogenic or neuropathic pain), epilepsy, nicotine addiction, or
 XX CC schizophrenia. Parkinson's disease, small cell lung carcinoma, or
 XX CC Alzheimer's disease. The alpha-conotoxin-like peptide is also useful for
 XX CC accelerating recovery from nerve injury. The peptides are also useful as
 XX CC research reagents for investigating nicotinic acetylcholine receptor
 XX CC physiology and pharmacology. The current sequence represents a PCR primer
 XX CC for the isolation of peptide Vcl.1
 XX CC Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
 XX SQ

Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTCGGCTCTTCGATGC 1567
 DB 19 CTCGGCTCTTCGATGC 1

RESULT 797
 ID AB221316/c
 XX ID AB221316 standard; DNA; 20 BP.
 XX AC AB221316;
 XX DT 24-FEB-2003 (first entry)
 XX DE PCR primer for the isolation of peptide Vcl.1 #SEQ ID 5.
 XX KW Alpha-conotoxin; cerebrotective; analgesic; anticonvulsant;
 XX KW neuroleptic; antiparkinsonian; cytostatic; nootropic; neuroprotective;
 XX KW neuronal nicotinic acetylcholine receptor; nAChR; inhibitor; stroke;
 XX KW pain; cancer related pain; post-surgical pain; oral pain;
 XX KW referred trigeminal neuralgia; post-herpetic neuralgia;
 XX KW phantom limb pain; fibromyalgia; reflex sympathetic dystrophy;
 XX KW rheumatoid arthritis; inflammatory arthritis; neurogenic pain;
 XX KW neuropathic pain; epilepsy; nicotine addiction; schizophrenia;
 XX KW Parkinson's disease; small cell lung carcinoma; Alzheimer's disease;
 XX KW nerve injury; PCR; primer; ss.
 XX OS Conus victoriae.
 XX PN WO200279236-A1.
 XX PD 10-OCT-2002.
 XX PF 28-MAR-2002; 2002WO-AU000411.
 XX PF 29-MAR-2001; 2001AU-00004094.
 XX PR
 XX PR

PA (LIVE/) LIVETT B.
 PA (KHAL/) KHALIL Z.
 PA (GAYL/) GAYLER K.
 PA (DOWN/) DOWN J.
 XX PI Livett B, Khalil Z, Gayler K, Down J;
 XX PI WPI; 2003-103260/09.
 XX DR
 XX DR
 XX DR
 XX PT New alpha- conotoxin-like peptides that inhibit the activity of neuronal
 XX PT nicotinic acetylcholine receptor, useful for treating stroke, pain,
 XX PT schizophrenia, Parkinson's disease, small cell lung carcinoma or
 XX PT Alzheimer's disease.
 XX PS
 XX PS Claim 18; Page 31; 87pp; English.
 XX CC The invention relates to an isolated alpha-conotoxin-like peptide
 XX CC sequence. The activity of peptides of the invention may be described as
 XX CC cerebrotective, analgesic, anticonvulsant, neuroleptic,
 XX CC antiparkinsonian, cytostatic, nootropic and neuroprotective. Peptides of
 XX CC the invention are neuronal nicotinic acetylcholine receptor (nAChR)
 XX CC inhibitors. The alpha-conotoxin-like peptide is useful for treating a
 XX CC condition mediated by a neuronal nicotinic acetylcholine receptor, e.g.
 XX CC stroke, pain (e.g. cancer related pain, post-surgical pain, oral or
 XX CC dental pain, referred trigeminal neuralgia, post-herpetic neuralgia,
 XX CC phantom limb pain, fibromyalgia, reflex sympathetic dystrophy, pain
 XX CC associated with inflammatory conditions, rheumatoid arthritis or
 XX CC inflammatory arthritis, or pain resulting from conditions associated with
 XX CC neurogenic or neuropathic pain), epilepsy, nicotine addiction, or
 XX CC schizophrenia. Parkinson's disease, small cell lung carcinoma, or
 XX CC Alzheimer's disease. The alpha-conotoxin-like peptide is also useful for
 XX CC accelerating recovery from nerve injury. The peptides are also useful as
 XX CC research reagents for investigating nicotinic acetylcholine receptor
 XX CC physiology and pharmacology. The current sequence represents a PCR primer
 XX CC for the isolation of peptide Vcl.1
 XX CC Sequence 20 BP; 4 A; 2 C; 8 G; 6 T; 0 U; 0 Other;
 XX SQ

Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 889 AACATCATCACATGCACA 907
 DB 20 AACATCATCCGATGCCCA 2

RESULT 798
 ADA44788
 XX ID ADA44788 standard; DNA; 20 BP.
 XX AC ADA44788;
 XX DT 20-NOV-2003 (first entry)
 XX DE Antisense oligonucleotide #ISIS 115460 #SEQ ID 86.
 XX KW Antisense oligonucleotide; cytostatic; immunosuppressive;
 XX KW antiinflammatory; gene therapy; hyperproliferative disorder; cancer;
 XX KW autoimmune; inflammatory disorder; inhibitor-kappa B kinase-gamma; ss;
 XX KW human.
 XX OS Homo sapiens.
 XX PN
 XX PN Key Location/Qualifiers
 XX FT modified_base 1..20
 XX FT /tag= b
 XX FT /mod_base= OTHER
 XX FT /note= "Phosphorothioate linkages, all cytosines are 5-
 XX FT methylcytosine"
 XX FT modified_base 1..5
 XX FT /tag= a
 XX FT /mod_base= OTHER

```
FT FT modified_base /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT FT 16..20
FT FT /*tag= c
FT FT /mod_base= OTHER
FT FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX PN WO2003031576-A2.
XX PD 17-APR-2003.
XX PP 03-OCT-2002; 2002WO-US031809.
XX PR 06-OCT-2001; 2001US-00972607.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Monia BP, Wyatt JR;
XX PS WPI; 2003-457242/43.
XX SQ New compound having sequence targeted to nucleic acid encoding inhibitor-
XX kappa B kinase-gamma, useful for preparing composition for treating e.g.,
XX cancer, or inflammatory or autoimmune disorder.
XX Claim 3; Page 78; 106pp; English.
XX CC The invention relates to an antisense compound that is targeted to a
XX nucleic acid encoding inhibitor-kappa B kinase-gamma, specifically
XX hybridizing to the nucleic acid encoding inhibitor-kappa B kinase-gamma
XX and inhibiting its expression. Compounds of the invention are antisense
XX oligonucleotides comprising at least one modified internucleoside
XX linkage, which is a 2',O-methoxyethyl sugar moiety, or at least one
XX moiety, which is a 2',O-methoxyethyl sugar moiety. Preferably, the
XX modified nucleobase, which is a 5-methylcytosine. The compound of
XX antisense oligonucleotide is a chimeric oligonucleotide. The compound of
XX the invention is useful for preparing a composition for treating a
XX hyperproliferative disorder e.g., cancer, or an autoimmune or
XX inflammatory disorder. The methods are useful for inhibiting the
XX expression of inhibitor-kappa B kinase-gamma in cells or tissues, and
XX treating an animal having a disease or condition associated with
XX inhibitor-kappa B kinase-gamma. Sequences given in AD44713-AD44790
XX represent antisense oligonucleotides for the inhibition of human
XX inhibitor-kappa B kinase-gamma mRNA levels.
XX SQ Sequence 20 BP; 3 A; 8 C; 8 G; 1 T; 0 U; 0 Other;
XX Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 7.3e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 78 AGGCGCCCGCGGCTCTGAG 96
DB 1 AGGCGCCCGCGGCTCTGAG 19
RESULT 799
ABT34198/C
ID ABT34198 standard; DNA; 20 BP.
XX AC ABT34198;
XX DT 12-JUN-2003 (first entry)
XX DE Mouse short heterodimer partner-1 expression oligo SEQ ID NO 73.
XX KW Antiarteriosclerotic; cardiant; vasotropic; antineoplastic; cytostatic;
XX antiinflammatory; inhibitor; antisense gene therapy; atherosclerosis;
XX short heterodimer partner-1; abnormal; lipid; cholesterol metabolism;
XX cardiovascular disease; infection; inflammation; tumour formation; mouse;
XX antisense; ds.
XX OS Unidentified.
XX FT
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PN WO2003012033-A2.
XX 13-FEB-2003.
XX PP 17-JUL-2002; 2002WO-US023245.
XX PR 31-JUL-2001; 2001US-00919197.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke RM, Graham MJ;
XX PS WPI; 2003-248161/24.
XX SQ New antisense oligonucleotide targeted to a nucleic acid encoding short
XX heterodimer partner-1, useful for treating diseases involving abnormal
XX lipid or cholesterol metabolism, e.g atherosclerosis or cardiovascular
XX diseases.
XX Claim 3; Page 95; 121pp; English.
XX CC The invention relates to a novel compound of 8 - 50 nucleobases in length
XX targeted to a nucleic acid molecule encoding a short heterodimer partner-
XX 1. The novel compound specifically hybridizes with a nucleic acid
XX molecule encoding the short heterodimer partner-1, and inhibits the
XX expression of the nucleic acid molecule. The compound, and a composition
XX comprising it are useful for treating a disease or condition associated
XX with the short heterodimer partner-1, particularly a condition involving
XX abnormal lipid or cholesterol metabolism such as atherosclerosis or a
XX cardiovascular disease. They are also useful in research and diagnostics
XX for modulating the expression of short heterodimer partner-1. They can
XX also be useful prophylactically in preventing or delaying infection,
XX inflammation or tumour formation. This polynucleotide sequence represents
XX a mouse antisense oligo relating to the heterodimer partner-1 of the
XX invention
XX SQ Sequence 20 BP; 9 A; 4 C; 7 G; 0 T; 0 U; 0 Other;
XX Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 7.3e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1111 CCTGACATCCTCTGGGT 1129
DB 20 CCTCTCTCTCTCTGGGT 2
RESULT 800
ACC49703/C
ID ACC49703 standard; DNA; 20 BP.
XX AC ACC49703;
XX DT 01-JUL-2003 (first entry)
XX DE Human KSR chimeric phosphorothioate oligonucleotide SEQ ID NO:73.
XX KW Human; kinase suppressor of ras-1; KSR; cytostatic; KSR inhibitor;
XX antisense gene therapy; hyperproliferative disorder; phosphorothioate;
XX developmental disorder; antisense oligonucleotide; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX FT Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= a
XX /mod_base= OTHER
XX /note= "phosphorothioate backbone"
XX modified_base 1..5
XX /*tag= b
XX /mod_base= OTHER
XX /note= "2'-O-methoxyethyls (2'-MOE)"
XX FT
```

FT modified_base 16. .20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls (2'-MOE) "

PN WO2003025144-A2.

XX 27-MAR-2003.

XX 19-SEP-2002; 2002WO-US029705.

XX 20-SEP-2001; 2001US-00961001.

XX (ISIS-) ISIS PHARM INC.

XX Monia BP, Freier SM;

XX WPI; 2003-363140/34.

PT New compounds, particularly antisense oligonucleotides targeted to a
PT nucleic acid encoding KSR, useful for treating a disease/condition
PT associated with KSR, such as hyperproliferative or developmental
PT disorders.

XX Example 15; Page 75; 102pp; English.

CC The present invention describes a compound 8-50 nucleobases in length
CC targeted to, and which specifically hybridizes with a nucleic acid
CC molecule encoding kinase suppressor of ras-1 (KSR), and inhibits the
CC expression of KSR. Also described: (1) a compound 8-50 nucleobases in
CC length that specifically hybridizes with at least an 8-nucleobase portion
CC of an active site on a nucleic acid molecule encoding KSR; (2) a
CC composition comprising the compound and a carrier or diluent; (3)
CC inhibiting the expression of KSR in cells or tissues by contacting the
CC cells or tissues with the compound so that expression of KSR is inhibited
CC ; and (4) treating an animal having a disease or condition associated
CC with KSR by administering to the animal a therapeutic or prophylactic
CC amount of the compound so that expression of KSR is inhibited. The
CC compound has cytostatic activity and can be used as a KSR inhibitor, and
CC in antisense gene therapy. The compound, composition and methods are
CC useful for treating a disease or condition associated with KSR, such as a
CC hyperproliferative or developmental disorder, or a disease or condition
CC arising from aberrant apoptosis by inhibiting the expression of KSR. They
CC are also useful in research and diagnostics for modulating the expression
CC of KSR. The present sequence represents a chimeric phosphorothioate
CC antisense oligonucleotide of human KSR, which is used in an example from
CC the present invention

SQ Sequence 20 BP; 2 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 366 GAGTACACGAGCTTCAGCC 384

DB 19 GAGAGACCCAGCTTCAGCC 1

RESULT 801

ID ACC50005/c

XX ACC50005 standard; DNA; 20 BP.

XX 14-JUL-2003 (first entry)

XX Oligonucleotide primer ITS3.

XX Mitochondria; fungal pathogen; PCR; primer; ss.

XX Synthetic.

XX

PN WO2003027635-A2.

XX 03-APR-2003.

XX 19-SEP-2002; 2002WO-US030311.

XX 24-SEP-2001; 2001US-00961755.

XX (SYGN) SYNGENTA PARTICIPATIONS AG.

XX Beck JU, Barnett CJ;

XX WPI; 2003-363229/34.

PT Detecting a fungal pathogen, useful for monitoring disease development,
PT comprises subjecting the DNA to PCR amplification using at least one
PT primer having sequence identity with at least 10 contiguous nucleotides
PT of Fusarium spp.

PS Claim 6; Page 17; 44pp; English.

CC This invention relates to the detection of a fungal pathogen comprising
CC isolating DNA from a plant leaf infected with a pathogen. The methods and
CC primers are useful for identifying fungal isolates of fungal pathogens
CC and monitoring of disease development in plant populations. The present
CC sequence represents an oligonucleotide primer used to detect Fusarium ear
CC rot pathogens

SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;

Best Local Similarity 84.2%; Pred. No. 7.3e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1549 CTTGCGTCTTCGTCGATGC 1567

DB 19 CTGCGTCTTCATCGATGC 1

RESULT 802

ID ACC50004 standard; DNA; 20 BP.

XX ACC50004;

XX 14-JUL-2003 (first entry)

XX Oligonucleotide primer ITS2.

XX Mitochondria; fungal pathogen; PCR; primer; ss.

XX Synthetic.

XX WO2003027635-A2.

XX 03-APR-2003.

XX 19-SEP-2002; 2002WO-US030311.

XX 24-SEP-2001; 2001US-00961755.

XX (SYGN) SYNGENTA PARTICIPATIONS AG.

XX Beck JU, Barnett CJ;

XX WPI; 2003-363229/34.

PT Detecting a fungal pathogen, useful for monitoring disease development,
PT comprises subjecting the DNA to PCR amplification using at least one
PT primer having sequence identity with at least 10 contiguous nucleotides
PT of Fusarium spp.

PS Claim 6; Page 17; 44pp; English.

Query Match	0.88;	Score 14.2;	DB 1;	Length 20;
Best Local Similarity	84.2%;	Pred. No. 7.3e+02;		
Matches 16;	Conservative 0;	Mismatches 3;	Indels 0;	Gaps 0;
QY	1424	GGATCTCCGACAGGATGC	1442	
DB	20	GGATCTCCGTAGACGAAGC	2	
RESULT 806				
AAD52299				
ID	AAD52299	standard; DNA; 20 BP.		
XX	AC	AAD52299;		
XX				
DT	02-MAY-2003	(first entry)		
XX				
DE	Human IFNGR2 antisense oligonucleotide, ISIS #142777.			
XX				
KW	Antisense; interferon gamma receptor 2; autoimmune disorder; cancer;			
KW	autoimmune thyroiditis; autoimmune insulinitis; multiple sclerosis;			
KW	diabetes; autoimmune arthritis; Crohn's disease; apoptosis; IFNGR2;			
XX	gene therapy; prophylaxis; human; phosphorothioate; ss.			
XX				
OS	Homo sapiens.			
OS	Synthetic.			
XX				
Key		Location/Qualifiers		
FT	modified_base	1..20		
FT		/*tag= a		
FT		/mod_base= OTHER		
FT		/note= "phosphorothioate backbone; All cytidine residues		
FT		are 5-methylcytidines"		
FT	modified_base	1..5		
FT		/*tag= b		
FT		/mod_base= OTHER		
FT		/note= "2'-methoxyethyl nucleotides"		
FT	modified_base	15..20		
FT		/*tag= c		
FT		/mod_base= OTHER		
FT		/note= "2'-methoxyethyl nucleotides"		
XX				

PN WO200288163-A1.
XX 07-NOV-2002.
XX 16-APR-2002; 2002WO-US012007.
XX 26-APR-2001; 2001US-00843377.
XX (ISIS-) ISIS PHARM INC.
XX Bennett CF, Watt AT;
XX WPI; 2003-156688/15.
XX New antisense oligonucleotides for modulating interferon gamma receptor
PT 2, particularly useful for treating autoimmune disorders (e.g. multiple
PT sclerosis or Crohn's disease), cancers or diseases caused by aberrant
PT apoptosis.
XX Claim 3; Page 85; 127pp; English.
XX The invention relates to antisense compounds, composition and methods for
CC modulating the expression of human interferon gamma receptor 2 (IFNGR2).
CC The compositions comprise antisense compounds targetted to nucleic acids
CC encoding IFNGR2. Antisense compounds of the invention are useful for
CC treating diseases or conditions associated with IFNGR2, e.g. autoimmune
CC disorder (e.g. autoimmune thyroiditis, diabetes, multiple sclerosis,
CC autoimmune arthritis, autoimmune insulinitis or Crohn's disease), cancer,
CC or a disease/disorder caused by aberrant apoptosis. They are also useful
CC for diagnostics, therapeutics, prophylaxis or as research reagents or
CC kits. The invention is useful in gene therapy. The present sequence is an
CC antisense oligonucleotide targetted to human IFNGR2 DNA
XX Sequence 20 BP; 4 A; 3 C; 8 G; 5 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 62 TGCTGAAACCCAGGGAGG 80
Db 2 TGCTGAGCTCAGTGGAGG 20
RESULT 807
AAD55498/C
ID AAD55498 standard; DNA; 20 BP.
XX AAD55498;
XX 07-AUG-2003 (first entry)
XX Human FGFR-3 antisense oligonucleotide, ISIS #125204.
XX Human; antisense; fibroblast growth factor receptor 3; prophylaxis;
KW developmental disorder; hyperproliferative disorder; antisense therapy;
KW FGFR-3; ACH; JTK4; CEK2; cancer; phosphorothioate; ss.
XX Homo sapiens.
OS Synthetic.
XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidine residues
FT are 5-methylcytidines"
FT 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT 16..20
FT modified_base
FT /tag= c

FT /mod_base= OTHER
FT /note= "2 -methoxyethyl (2'-MOE) nucleotides"
XX WO2003023004-A2.
XX 20-MAR-2003.
XX 06-SEP-2002; 2002WO-US028549.
XX 10-SEP-2001; 2001US-00953047.
XX (ISIS-) ISIS PHARM INC.
XX Monia BP, Wyatt JR;
XX WPI; 2003-313244/30.
XX Novel compound targetted to a nucleic acid molecule encoding fibroblast
PT growth factor receptor 3, useful for inhibiting the expression of the
PT receptor and for treating an animal having cancer or developmental
PT disorder.
XX Claim 3; Page 79; 120pp; English.
XX The invention relates to antisense compounds targetted to a nucleic acid
CC molecule encoding fibroblast growth factor (FGF) receptor 3 (also known
CC as FGFR-3, ACH, JTK4 and CEK2) to inhibit its expression. Antisense
CC compounds of the invention are useful for treating diseases or conditions
CC associated with FGFR-3 such as developmental disorders or
CC hyperproliferative disorders, especially cancer of colorectal, bladder,
CC bone, lung, cervical, breast or skin. They are useful as research
CC reagents, therapeutics, prophylaxis, kits and diagnostics, and as tools
CC in differential and/or combinatorial analyses to elucidate expression
CC patterns of a portion of the genes expressed within cells and tissues.
CC They are also useful in antisense therapy. The present sequence is an
CC antisense oligonucleotide targetted to human FGFR-3
XX Sequence 20 BP; 3 A; 8 C; 3 G; 6 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 335 ACGAGGACTTGAAGATGGG 353
Db 20 ACGGTAACCTGAAGATGGG 2
RESULT 808
AAL55617/C
ID AAL55617 standard; DNA; 20 BP.
XX AAL55617;
XX 29-JUL-2003 (first entry)
XX Fungal universal ITS3 PCR primer - used to amplify ITS2 region DNA.
DE Fungal; ITS3; interspace 3 region; ss; fermentation process; lovastatin;
KW exocellular pravastatin production; statin; HMG-CoA; primer; PCR;
KW cholesterol synthesis; cholesterol-lowering drug;
KW hydroxy-methylglutaryl coenzyme A reductase.
XX Fungi sp.
OS EP1266967-A1.
XX 18-DEC-2002.
XX 15-JUN-2001; 2001EP-00114462.
XX 15-JUN-2001; 2001EP-00114462.

PA (GNOS-) GNOSIS SRL.
XX Benedetti A, Manzoni M, Nichele M, Rollini M;
XX WPI; 2003-423103/40.
XX Fermentation useful for producing pravastatin involves pre-fermenting
PT fungal strain in first nutrient medium, and then fermenting strain in
PT second nutrient medium.
XX Disclosure; Page 10; 15pp; English.
XX The invention relates to a novel fermentation process to be used in the
CC production of excellular pravastatin and lovastatin which comprises
CC cultivating microorganisms from *Aspergillus* and *Monascus* species. Statins
CC are fungal secondary metabolites which inhibit hydroxy-methylglutaryl
CC coenzyme A (HMG-CoA) reductase, the first committed enzyme of cholesterol
CC synthesis. Statins are therefore used as cholesterol-lowering drugs. The
CC fermentation process facilitates the production of extracellular
CC pravastatin, either in a cell-associated form or releasable into the
CC culture broth, directly, as a secondary metabolite, in the fermentation
CC culture medium. Those production processes currently in existence
CC generate relatively low yields. In contrast, the process of the invention
CC produces relatively high yields of pravastatin i.e. at least 500 mg/l
CC using *Aspergillus terreus* and a very high yield i.e. 1 - 4 g/l using
CC *Monascus ruber*. In addition, the process uses simple and complex carbon
CC sources obtained from agricultural waste thereby reducing production
CC costs. The current sequence is that of the fungal universal ITS3 PCR
CC primer of the invention which was used to amplify the *Aspergillus terreus*
XX (DSM 13596) ITS2 region DNA
XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
XX Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 7.3e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1549 CTTCGGTCTTCGATGC 1567
Db 19 CTGCGTCTTCGATGC 1
RESULT 809
ABX33731
ID ABX33731 standard; DNA; 20 BP.
XX AC ABX33731;
XX 10-FEB-2003 (first entry)
XX PCR primer #14 for human oestrogen receptor alpha (ESR1) gene.
XX Human; oestrogen receptor alpha; ESR1; cancer; osteoporosis;
XX cardiovascular disorder; variant oestrogen receptor; ESR1 haplotype;
XX ESR1 polymorphism detection; cytostatic; osteopathic; cardiant; PCR;
XX primer; ss.
XX Homo sapiens.
XX US2002123095-A1.
XX 05-SEP-2002.
XX 21-AUG-2001; 2001US-00933267.
XX 20-OCT-1999; 99US-0160626P.
XX 22-FEB-2000; 2000US-0183756P.
XX 20-OCT-2000; 2000US-00692414.
XX 24-JAN-2001; 2001US-00768184.
XX 13-MAR-2001; 2001US-00804076.
XX 05-APR-2001; 2001US-00826314.
XX (PEKE) PE CORP NY.
XX PA

XX Kalush F, Cassel MJ, Hwang SS, Winn-Deen ES;
XX WPI; 2003-066793/06.
XX Novel isolated estrogen receptor alpha variant peptide, useful in
PT development of diagnostics and therapies for diseases or disorders
PT mediated/modulated by the estrogen receptor, or as immunogens to raise
PT antibodies.
XX Claim 1; Fig 2d; 186pp; English.
XX The present invention relates to the sequencing of genomic DNA encoding
CC human oestrogen receptor alpha (ESR1) protein. The gene encoding human
CC ESR1 is located on chromosome 6. The invention provides the genomic
CC structure of the ESR1 gene and novel single nucleotide polymorphisms
CC (SNPs)/haplotypes in the gene. The polymorphisms/haplotypes can lead to
CC a variety of disorders (such as cancer, osteoporosis, and cardiovascular
CC disorders) that are mediated by a variant oestrogen receptor. The
CC invention provides methods of detecting ESR1 polymorphisms/haplotypes in
CC a sample, methods of determining a risk of having or developing a
CC disorder mediated by a variant oestrogen receptor and methods for
CC screening compounds useful for treating such disorders. ABX33718-ABX33755
XX represent PCR primers for the human ESR1 gene
XX Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;
XX Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 7.3e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 826 TCCTCACCCCTGTCTTG 844
Db 1 TCCACACGCTGTCTTGG 19
RESULT 810
ACC47147/c
ID ACC47147 standard; DNA; 20 BP.
XX AC ACC47147;
XX 23-JUN-2003 (first entry)
XX Nucleotide sequence of 5'-biotin-labeled universal capture probe ITS3-B.
XX Dimorphic fungus; internal transcribed spacer-2; ITS2; fungal infection;
XX probe; ss.
XX Synthetic.
XX WO2003027329-A1.
XX 03-APR-2003.
XX 25-SEP-2002; 2002WO-US030605.
XX 26-SEP-2001; 2001US-0325241P.
XX (USSH) US DEPT HEALTH & HUMAN SERVICES.
XX Lindsley MD, Qin Z, Choi JS, Morrison CU;
XX WPI; 2003-354661/33.
XX Detecting a dimorphic fungus, useful for diagnosing fungal infections,
PT comprises detecting the presence or absence of an internal transcribed
PT spacer-2 (ITS2) nucleic acid sequence of a dimorphic fungus within a
PT sample.
XX Claim 5; Page 35; 71pp; English.
XX The invention relates to detecting a dimorphic fungus. The method
XX CC

CC involves detecting the presence or absence of an internal transcribed
 CC spacer-2 (ITS2) nucleic acid sequence of a dimorphic fungus within a
 CC sample, where the presence of the ITS2 nucleic acid sequence indicates
 CC the sample was contacted by the dimorphic fungus. The method is useful
 CC for detecting or diagnosing fungal infections. The array is useful for
 CC screening a sample for the presence of, or contamination by a dimorphic
 CC fungus. The present sequence represents a 5'-biotin-labeled universal
 CC capture probe, used for detecting a dimorphic fungus

XX
 SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCGGTCTTCGATGC 1567
 |||||
 DB 19 CTTCGGTCTTCGATGC 1

RESULT 811
 AAL62456/C
 ID AAL62456 standard; DNA; 20 BP.
 AC AAL62456;
 XX
 XX
 DT 06-OCT-2003 (first entry)
 XX
 DE Human ABC transporter MHC I antisense oligonucleotide, ISIS 206637.
 XX
 KW ABC transporter; ABCT; major histocompatibility complex; MHC; cytostatic;
 KW hyperproliferative; autoimmune disorder; antisense gene therapy;
 KW inflammation; tumour formation; immunosuppressive; antimicrobial; human;
 KW phosphorothioate backbone; antisense; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.

XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"
 FT modified_base 1..5
 FT /tag= b
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl nucleotides"
 FT modified_base 16..20
 FT /tag= c
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl nucleotides"
 XX
 PN WO2003051309-A2.
 XX
 PD 26-JUN-2003.
 XX
 PF 12-DEC-2002; 2002WO-US040101.
 XX
 PR 17-DEC-2001; 2001US-00024369.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Borchers AH, Ward DT, Preier SM;
 XX
 XX WPI; 2003-577305/54.
 DR
 XX New antisense compound that hybridizes and inhibits the nucleic acid
 PT encoding ABC transporter major histocompatibility complex 1, for treating
 PT diseases or conditions such as a hyperproliferative or autoimmune
 PT disorder.
 XX
 PS Claim 3; Page 81; 112pp; English.

XX
 CC The invention relates to a compound targetted to a nucleic acid molecule
 CC encoding ABC transporter (ABCT) major histocompatibility complex (MHC) 1
 CC where the compound specifically hybridises with the nucleic acid molecule
 CC and inhibits expression of ATM or specifically hybridises with at least a
 CC portion of an active site on the nucleic acid molecule. The invention is
 CC useful for inhibiting the expression of ATM in cells or tissues. The
 CC invention is useful for treating an animal with hyperproliferative or
 CC autoimmune disorder. The invention is useful for diagnostics,
 CC therapeutics, prophylaxis, as research reagents and kits, for
 CC distinguishing functions of various members of a biological pathway and
 CC in antisense gene therapy. The invention is also useful prophylactically
 CC e.g., to prevent or delay infection, inflammation or tumour formation.
 CC The present sequence is an antisense oligo targetted to human ABC
 CC transporter MHC I DNA. This sequence is used to illustrate the method of
 CC the invention

XX
 SQ Sequence 20 BP; 3 A; 8 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1461 CCTCAGCTCTGGGAGCGG 1479
 |||||
 DB 20 CCTCAGCTCTGGGAGCGG 2

RESULT 812
 AAL60972/C
 ID AAL60972 standard; DNA; 20 BP.
 XX
 AC AAL60972;
 XX
 DT 22-SEP-2003 (first entry)
 XX
 DE Human MyD88 antisense oligonucleotide, ISIS #190957.
 XX
 KW Antisense; human; myeloid differentiation primary response gene 88;
 KW MyD88; Alzheimer's disease; neurodegenerative disease; schizophrenia;
 KW gene therapy; Down's syndrome; phosphorothioate; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.

XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone; All cytidine residues are 5-methylcytidines"
 FT modified_base 1..5
 FT /tag= b
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
 FT modified_base 16..20
 FT /tag= c
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
 XX
 PN WO2003046132-A2.
 XX
 PD 05-JUN-2003.
 XX
 PF 20-NOV-2002; 2002WO-US037411.
 XX
 PR 23-NOV-2001; 2001US-00021707.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Karras JG, Dobie K;
 XX
 XX WPI; 2003-505193/47.

XX New antisense compound, having a sequence targeted to a nucleic acid
PT encoding MyD88, useful for preparing a composition for treating
PT neurodegenerative disease, e.g. Alzheimer's disease.
XX
XX
PS Claim 3; Page 76; 106pp; English.
XX
XX The invention relates to antisense compounds targetted to a nucleic acid
CC encoding human MyD88 (myeloid differentiation primary response gene 88)
CC to inhibit its expression. Antisense compounds of the invention are
CC useful for preparing a composition for treating neurodegenerative disease
CC e.g. Alzheimer's disease, Down's syndrome or schizophrenia. The invention
CC is also useful in gene therapy. The present sequence is an antisense
CC oligonucleotide targetted to human MyD88 DNA
XX
SQ Sequence 20 BP; 7 A; 6 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 836 TTGCTTTTGAGTACTGGG 854
Db 19 TGGACTTTGAGTACTTGA 1

RESULT 813
ADC36216
ID ADC36216 standard; DNA; 20 BP.
XX
AC ADC36216;
XX
DT 18-DEC-2003 (first entry)
XX
DE Weed controller metabolism associated PCR primer SEQ ID NO:83.
XX
KW weed controller metabolism; weed; herbicide; herbicide-resistant plant;
KW agrochemical; ss; PCR; primer.
XX
OS Synthetic.
XX
XX WO2003040370-A1.
PN
XX
PD 15-MAY-2003.
XX
XX 17-OCT-2002; 2002WO-JP010789.
PF
XX 19-OCT-2001; 2001JP-00321307.
PR
XX 07-JUN-2002; 2002JP-00167239.
PR
XX (SUMO) SUMITOMO CHEM CO LTD.
PA
XX Nakajima H, Mukumoto F, Takaishi M;
PI
XX WPI; 2003-523102/49.
DR
XX
XX
PT Weed controller metabolism proteins deactivating porphyrinogen oxidase
PT (PPO)-inhibiting herbicides by N-demethylation and their genes, useful
PT e.g. in constructing new breeds of herbicide-resistant plants.
XX
XX Disclosure; SEQ ID NO 83; 812pp; Japanese.
PS
XX The invention relates to a novel DNA encoding a weed controller
CC metabolism protein. A protein of the invention has herbicide activity.
CC The proteins and their encoded genes are useful e.g. in constructing new
CC breeds of herbicide-resistant plants and also in developing various
CC agrochemicals. The present sequence is used in the exemplification of the
CC invention.
XX
XX Sequence 20 BP; 4 A; 5 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1222 GTGGAGGACAGCTACACT 1240
Db 1 GTGGAGGACTGCTCGCT 19

RESULT 814
ADC35560/c
ID ADC35560 standard; DNA; 20 BP.
XX
AC ADC35560;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human CD81/TAPA-1 antisense oligonucleotide #20.
XX
KW Antisense; ss; human; CD81; TAPA-1; tetraspanin; viral infection;
KW cocaine addiction; autoimmune disorder; antiinflammatory; antibacterial;
KW virucide; antiparasitic; inflammatory disorder; parasitic infection;
KW bacterial infection.
XX
OS Homo sapiens.
XX
XX Location/Qualifiers
FT Key 1..20
FT modified_base /tag= b
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone and all cytidines are 5
FT -methyl cytidines"
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl nucleotide"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl nucleotide"
XX
XX US2003113914-A1.
XX
XX 19-JUN-2003.
PD
XX
XX 10-DEC-2001; 2001US-00006430.
PF
XX
XX 10-DEC-2001; 2001US-00006430.
PR
XX (ISIS-) ISIS PHARM INC.
PA
XX Graham MJ, Dobie K;
PI
XX WPI; 2003-810907/76.
DR
XX Novel compound hybridizing with nucleic acid molecule encoding CD81 and
XX inhibiting the expression of CD81, useful for treating infections and
XX disease associated with expression of CD81 such as inflammation disorder.
PS
XX Claim 3; SEQ ID NO 32; 55pp; English.
XX
XX The invention relates to a compound (antisense oligonucleotide)
CC hybridising with the eighth nucleobase portion of an active site on a
CC nucleic acid molecule encoding CD81 (also known as TAPA-1, a tetraspanin)
CC and inhibiting the expression of CD81. Also included is a composition
CC comprising the antisense oligonucleotide and a carrier or a diluent. The
CC antisense oligonucleotide is useful for inhibiting the expression of CD81
CC in cells or tissues. The antisense oligonucleotide is also useful for
CC treating infections preferably viral, bacterial and parasitic and
CC diseases such as inflammatory disorders and autoimmune disorders. The
CC disease or condition is characterised by chemical dependency (e.g.
CC cocaine addiction). The present sequence is a CD81 antisense
CC oligonucleotide of the invention.
XX
XX Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 855 CAGGACCTGAGACATAC 873
 DB 19 CAAGGATGTGAGCAGTTC 1

RESULT 815
 AAQ51806
 ID AAQ51806 standard; DNA; 21 BP.
 XX AC AAQ51806;
 XX DT 20-DEC-1993 (first entry)
 XX DE Encodes ballast constituent in pINT69d pro-insulin fusion protein.
 XX DE
 XX DE Fusion protein; ballast constituent; monkey pro-insulin; increased;
 XX KW recombinant protein production; HMG CoA reductase;
 XX KW human 3-hydroxy-3-methylglutaryl-coenzyme A-reductase;
 XX KW mixed oligonucleotide; ds.
 XX OS Synthetic.
 XX PN US5227293-A.
 XX PD 13-JUL-1993.
 XX PF 23-APR-1992; 92US-00838221.
 XX PR 29-AUG-1989; 89US-00399874.
 XX PR 28-AUG-1990; 90WO-US004840.
 XX PA (GENO) GEN HOSPITAL CORP.
 XX PA (FARH) HOECHST AG.
 XX PI Stengelin S, Ulmer W, Habermann P, Uhlmann E, Seed B;
 XX DR WPI; 1991-102070/14.
 XX DR P-PSDB; AAR44307.
 XX PT Prepn. of fusion proteins contg. ballast constituent and protein - giving
 XX PT prods. which are protease resistant or insoluble.
 XX PS Example 8; Col 7-8; 22pp; English.
 XX CC Sequence AAQ51806 is a specific example of the novel generic ballast
 XX CC constituent coding sequence. The invention covers fusion proteins in
 XX CC which a short ballast constituent is fused to a desired protein, esp. to
 XX CC modified pro-insulin, to increase recombinant production of the protein.
 XX CC See AAQ51798-Q51799 and AAQ51802-Q51811
 XX SQ Sequence 21 BP; 10 A; 6 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 885 TGGGACATCATCAACATG 903
 DB 2 TGGCACACATCATCAACAG 20

RESULT 816
 AAQ57291
 ID AAQ57291 standard; mRNA; 21 BP.
 XX AC AAQ57291;
 XX DT 25-MAR-2003 (revised)

DT 26-JUL-1994 (first entry)
 XX Enzymatic RNA molecule c-myb mRNA target sequence.
 XX KW Specific; cleavage; target RNA; protein; prophylaxis; expression;
 XX KW inhibitor; inhibition; ribozyme; treatment; prevention; psoriasis;
 XX KW asthma; inflammatory diseases; restenosis; cardiovascular condition;
 XX KW hypertension; arthritis; ss.
 XX OS Synthetic.
 XX PN WO9402595-A1.
 XX PD 03-FEB-1994.
 XX PF 02-JUL-1993; 93WO-US006316.
 XX PR 17-JUL-1992; 92US-00916763.
 XX PR 07-DEC-1992; 92US-00387132.
 XX PR 07-DEC-1992; 92US-00989848.
 XX PR 07-DEC-1992; 92US-00989849.
 XX PR 19-JAN-1993; 93US-00008895.
 XX PA (RIBO-) RIBOZYME PHARM INC.
 XX PI Sullivan SM, Draper KG;
 XX DR WPI; 1994-048853/06.
 XX PT Enzymatic RNA molecules which cleave mRNA - used to treat or prevent
 XX PT inflammatory, arthritic, stenotic or cardiovascular diseases or
 XX PT conditions.
 XX PS Claim 3; Page 20; 65pp; English.
 XX CC This is a c-myb mRNA target sequence (nucleotide no. 1919) of an
 XX CC enzymatic RNA molecule (ribozyme) which cleaves mRNA associated with the
 XX CC development or maintenance of a restenotic condition. The concn. of the
 XX CC ribozyme necessary to effect a therapeutic treatment is lower than that
 XX CC of an antisense oligonucleotide and the specificity of action is higher.
 XX CC (Updated on 25-MAR-2003 to correct PN field.)
 XX SQ Sequence 21 BP; 4 A; 5 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 859 GACCTGAAGCAGTACCTGG 877
 DB 1 GCCTTGTAGCAGTACCTGG 19

RESULT 817
 AAT42247/c
 ID AAT42247 standard; DNA; 21 BP.
 XX AC AAT42247;
 XX DT 20-FEB-1997 (first entry)
 XX DE Primer derived from hlyA gene used in modified PCR method.
 XX KW Detection; PCR; polymerase chain reaction; hybrid; antibody;
 XX KW immunochemical detection; ss.
 XX OS Synthetic.
 XX PN CA2139070-A.
 XX PD 24-JUN-1996.
 XX PF 23-DEC-1994; 94CA-02139070.

XX 23-DEC-1994; 94CA-02139070.

XX (BLAI/) BLAIS B W.

XX Blais BW;

XX WPI; 1996-413110/42.

XX Detection of nucleic acid sequences - by polymerase chain reaction
PT amplification, transcription using RNA polymerase and detection of
PT RNA:DNA hybrids using antibodies.

XX Example 1; Page 16; 31pp; English.

XX A new method for the detection of nucleic acids comprises (a) amplifying
CC a DNA by PCR using primers to which an appropriate RNA polymerase
CC promoter has been appended; (b) transcribing the amplified DNA into RNA
CC using an RNA polymerase; (c) forming RNA:DNA hybrids; and (d)
CC immunochemically detecting the RNA:DNA hybrids using antibodies directed
CC to RNA:DNA hybrids. Two primers (AAT42247, AAT42248) were selected from
CC the hlyA gene and spanned a 730 base pair region of the gene from
CC nucleotides 602-1332. For further use in the invention, the primer
CC described in AAT42247 had an additional 26 nucleotides added to it
CC corresponding to T7 RNA polymerase promoter sequence. The resulting
CC primer is described in AAT42249

XX Sequence 21 BP; 8 A; 1 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 7.6e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1503 TTCATATTGCACTAAG 1521

DB 19 TTCCATCTTCCACTAAG 1

RESULT 818

AAV51809

ID AAV51809 standard; DNA; 21 BP.

XX AAV51809;

DT 02-FEB-1999 (first entry)

XX Zea mays genome reverse PCR primer #105.

XX Polymorphic marker; allele-specific; probe; amplification; PCR primer;
KW hybridisation; plant; hybrid certification; genetic contribution;
KW progeny; back-cross; hybrid; ancestry; corn; ss.

XX Synthetic.

OS Zea mays.

XX WO9824796-A1.

PN 11-JUN-1998.

XX 01-DEC-1997; 97WO-US021782.

XX 02-DEC-1996; 96US-0032069P.

PR 07-MAR-1997; 97US-00813507.

XX (AFFY-) AFFYMETRIX INC.

XX Lemieux B, Landry BS, Sapolsky RJ, Murigneux A;

XX WPI; 1998-333252/29.

XX Brassica species allele-specific oligonucleotide probes and primers -
PT useful for plant breeding.

PS Example 1; Page 51; 65pp; English.

XX AAV51705-V52008 are reverse PCR primers used to amplify fragments of the
CC Zea mays genome in order to detect polymorphic markers. Such markers can
CC be used in the construction of allele-specific primers and probes for
CC amplification or hybridisation, e.g. to determine common or disparate
CC ancestry between 2 or more plants, to monitor the genetic contribution of
CC an ancestral plant, to trace the progeny of proprietary plants, in
CC certification of a hybrid plant or to identify the progeny of a back-
CC crossed plant with an ancestral plant

XX Sequence 21 BP; 7 A; 3 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 7.6e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 587 CTGAGATTGCTTTGGCAA 605

DB 2 CTGAGATTGATTGAAAA 20

RESULT 819

AAV51812

ID AAV51812 standard; DNA; 21 BP.

XX AAV51812;

DT 02-FEB-1999 (first entry)

XX Zea mays genome reverse PCR primer #108.

XX Polymorphic marker; allele-specific; probe; amplification; PCR primer;
KW hybridisation; plant; hybrid certification; genetic contribution;
KW progeny; back-cross; hybrid; ancestry; corn; ss.

XX Synthetic.

OS Zea mays.

XX WO9824796-A1.

XX 11-JUN-1998.

XX 01-DEC-1997; 97WO-US021782.

XX 02-DEC-1996; 96US-0032069P.

PR 07-MAR-1997; 97US-00813507.

XX (AFFY-) AFFYMETRIX INC.

XX Lemieux B, Landry BS, Sapolsky RJ, Murigneux A;

XX WPI; 1998-333252/29.

XX Brassica species allele-specific oligonucleotide probes and primers -
PT useful for plant breeding.

PS Example 1; Page 51; 65pp; English.

XX AAV51705-V52008 are reverse PCR primers used to amplify fragments of the
CC Zea mays genome in order to detect polymorphic markers. Such markers can
CC be used in the construction of allele-specific primers and probes for
CC amplification or hybridisation, e.g. to determine common or disparate
CC ancestry between 2 or more plants, to monitor the genetic contribution of
CC an ancestral plant, to trace the progeny of proprietary plants, in
CC certification of a hybrid plant or to identify the progeny of a back-
CC crossed plant with an ancestral plant

XX Sequence 21 BP; 7 A; 3 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 7.6e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 587 CTCGATTGGCTTGGGA 605
DB 2 CTCGATTGGATTGAAA 20

RESULT 820
AAAX09125/c
ID AAX09125 standard; DNA; 21 BP.
XX AC
XX AAX09125;
XX DT 24-MAR-1999 (first entry)
XX DE Human biallelic polymorphic marker upstream primer #5.
XX KW Polymorphism; biallelic; human; forensic; paternity testing; disease;
XX KW detection; phenotypic typing; characteristic; infection; hereditary;
XX KW autoimmune disease; cancer; inflammation; drug; therapy; medication;
XX KW treatment; marker; primer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX EN W09820165-A2.
XX PD 14-MAY-1998.
XX PF 05-NOV-1997; 97WO-US020313.
XX PR 06-NOV-1996; 96US-0030455P.
XX FA (WHEH) WHITEHEAD INST BIOMEDICAL RES.
XX PI Lander ES, Wang D, Hudson T;
XX WPI; 1998-286974/25.
XX PT New isolated nucleic acid segments from the human genome - used for
XX PT determining polymorphic forms for use in e.g. forensics, paternity
XX PT testing or phenotypic typing for disease.
XX PS Claim 15; Page 46; 310pp; English.
XX CC AAX09121-X10268 are allele-specific oligonucleotide primers used in the
XX CC isolation of various biallelic polymorphic markers found in the human
XX CC genome (represented in AAX0269-X12937). These primers can be used in a
XX CC method for determining polymorphic forms in an individual for use in e.g.
XX CC forensics, paternity testing or for phenotypic typing for diseases such
XX CC as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
XX CC dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial
XX CC hypercholesterolemia, polycystic kidney disease, hereditary
XX CC spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary
XX CC haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos
XX CC syndrome, osteogenesis imperfecta, acute intermittent porphyria,
XX CC autoimmune diseases, inflammation, cancer, diseases of the nervous
XX CC system, infection by pathogenic microorganisms, and characteristics such
XX CC as longevity, appearance (e.g. baldness, obesity), strength, speed,
XX CC endurance, fertility, and susceptibility or receptivity to particular
XX CC drugs or therapeutic treatments. The isolated polymorphic nucleic acid
XX CC segments can also be used to produce medicaments for the treatment or
XX CC prophylaxis of such diseases
XX SQ Sequence 21 BP; 7 A; 2 C; 10 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 7.6e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1678 CCCAACTACATCTCCCTG 1696
DB 21 CTCCACTACCTCTCCCTG 3

RESULT 821
AAV08249
ID AAV08249 standard; DNA; 21 BP.
XX AC
XX AAV08249;
XX DT 27-JAN-1999 (first entry)
XX DE PCR primer ABCR.EXON31.F for ABCR coding sequence.
XX KW ATP binding cassette; ABC transporter; ABCR; Stargardt Disease; therapy;
XX KW Fundus Flavimaculatus; age-related macular degeneration; diagnosis;
XX KW PCR primer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX EN W09837764-A1.
XX PD 03-SEP-1998.
XX PF 27-FEB-1998; 98WO-US003895.
XX PR 27-FEB-1997; 97US-0039388P.
XX FA (BAYU) BAYLOR COLLEGE MEDICINE.
XX FA (UJJO) UNIV JOHNS HOPKINS.
XX FA (USHH) US DEPT HEALTH & HUMAN SERVICES.
XX FA (UTAH) UNIV UTAH.
XX PI Allikmets R, Anderson KL, Dean M, Leppart M, Lewis RA, Li Y;
XX PI Lupski JR, Nathans J, Rattner A, Shroyer NF, Singh N, Smallwood PM;
XX PI Sun H;
XX WPI; 1998-495375/42.
XX PT Retina-specific ATP-binding cassette transporter and DNA - useful for,
XX PT e.g. diagnosis and treatment of macular degeneration, such as in
XX PT Stargardt Disease, Fundus Flavimaculatus and age-related degeneration.
XX PS Claim 41; Page 30; 79pp; English.
XX CC This sequence represents a PCR primer for DNA encoding the human retina
XX CC specific ATP binding cassette transporter (ABCR) of the invention. ABCR
XX CC may be used in compositions for screening agents that alters ABCR. The
XX CC agent can inhibit Stargardt Disease, Fundus Flavimaculatus and age-
XX CC related macular degeneration (MD). Primers (such as this sequence) and
XX CC probes for the ABCR DNA can be used in a diagnostic kit for detecting MD
XX SQ Sequence 21 BP; 6 A; 8 C; 3 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 7.6e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1389 CCTCACCAAGCTGTCAG 1407
DB 3 CATCACCCAGCTGTCAG 21

RESULT 822
AAV62007/c
ID AAV62007 standard; DNA; 21 BP.
XX AC
XX AAV62007;
XX DT 25-MAR-2003 (revised)
XX DT 11-JAN-1999 (first entry)
XX DE L monocytogenes hlyA gene PCR primer A.
XX KW Detection; pathogen; amplification; RNA enhancement product; PCR primer;

KW DNA/RNA hybrid; Listeria sp; Streptococcus sp; Lactobacillus sp;
 KW Lactococcus sp; Micrococcus sp; Enterococcus sp; Staphylococcus sp;
 KW Bacillus sp; Escherichia coli; Salmonella typhimurium;
 KW Yersinia enterocolitica; ss.
 XX Synthetic.
 OS Listeria monocytogenes.
 XX US5827661-A.
 XX 27-OCT-1998.
 XX 23-SEP-1996; 96US-00718596.
 XX 23-DEC-1994; 94CA-02137070.
 XX 30-DEC-1994; 94US-00366619.
 XX (KALY-) KALYX BIOSCIENCES INC.
 XX Blais BW;
 XX WPI; 1998-593985/50.
 XX Enhanced detection by nucleic acid amplification, especially of Listeria
 PT - uses formation of DNA-RNA hybrids after amplification, and then
 PT specific immuno-detection of these.
 XX Example 1; Col 12; 15pp; English.
 XX AAV62007-V62009 are PCR primers used in a novel method for the enhanced
 CC detection of DNA sequences, via a nucleic acid amplification procedure,
 CC especially for detecting pathogens. Minute samples of pathogens (c. 10
 CC cells) cannot be detected effectively by PCR. The minute quantities of
 CC product formed by PCR are then transcribed into RNA enhancement products,
 CC which further amplifies the target sequences to detectable levels.
 CC Detection then takes place with antibodies for DNA:RNA hybrids, which
 CC enable detection of the product volume formed is still small, but is
 CC specific enough just for this type of product. The method is especially
 CC useful for detecting the following pathogens: Listeria monocytogenes, L.
 CC innocua, L. ivanovi, L. seeligeri, L. welshimeri, L. murrayi, L. grayi,
 CC Streptococcus thermophilus, Lactobacillus casei, Lactococcus lactis,
 CC Micrococcus luteus, Enterococcus faecalis, Staphylococcus epidermidis,
 CC Bacillus cereus, Bacillus subtilis, Pseudomonas aeruginosa, Escherichia
 CC coli, Salmonella typhimurium, or Yersinia enterocolitica. (Updated on 25-
 XX MAR-2003 to correct PR field.)
 SQ Sequence 21 BP; 8 A; 1 C; 7 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1503 TTCCATATTTCCTAAAG 1521
 Db 19 TTCCATCTTCCCTAATG 1
 RESULT 823
 AAZ26124
 ID AAZ26124 standard; DNA; 21 BP.
 XX AAZ26124;
 AC AAZ26124;
 XX 30-NOV-1999 (first entry)
 DT Human polymorphic region 313.
 DE
 XX Polymorphism: human; inhibitor; cancer; treatment; cell growth; LOH;
 KW cell viability; loss of heterozygosity; precancerous condition; ASI;
 KW allele specific inhibitor; somatic cell; diagnosis; prevention;
 KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;
 KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;
 KW graft versus host disease; malignant cell removal; bone marrow; ss.

XX Homo sapiens.
 OS WO9841648-A2.
 XX 24-SEP-1998.
 XX 19-MAR-1998; 98WO-US005419.
 XX 20-MAR-1997; 97US-0041057P.
 XX (VARI-) VARIAGENICS INC.
 XX Houseman D, Ledley FD, Stanton VP;
 PI WPI; 1998-521232/44.
 XX Identifying target genes for allele-specific drugs - used for diagnosis,
 PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,
 PT dysplastic lesions, endometriosis or graft versus host disease.
 XX Disclosure; Fig 7; 605pp; English.
 XX This invention describes a novel method for identifying an inhibitor
 CC potentially useful for treatment of cancer, where the inhibitor is active
 CC on a gene vital for cell growth or viability, and where the gene is
 CC subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
 CC used for preventing the development of cancer in a patient having a
 CC precancerous condition, by administering to the patient a first allele
 CC specific inhibitor (ASI) targeted to an allele of a first essential gene
 CC present in cells of the precancerous condition, where the normal somatic
 CC cells of the patient are heterozygous for the first gene, the inhibitor
 CC is active on at least one but less than all allelic forms of the gene
 CC present in a population and targets only one allelic form present in the
 CC normal somatic cells, and the first gene. The products and methods can be
 CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.
 CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic
 CC lesions, benign tumours, endometriosis, polycystic kidney disease, and
 CC graft versus host disease. The method can also be used to remove
 CC malignant cells from bone marrow transplants. AAZ25812-226825 represent
 CC human polymorphic sites described in the method of the invention
 XX
 SQ Sequence 21 BP; 2 A; 12 C; 4 G; 3 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 940 GGCTGGCCTACTGCACC 958
 Db 3 GGCTGGCCTTCGCCACC 21
 RESULT 824
 AAZ26242/c
 ID AAZ26242 standard; DNA; 21 BP.
 XX AAZ26242;
 AC AAZ26242;
 XX 30-NOV-1999 (first entry)
 DT Human polymorphic region 431.
 DE
 XX Polymorphism: human; inhibitor; cancer; treatment; cell growth; LOH;
 KW cell viability; loss of heterozygosity; precancerous condition; ASI;
 KW allele specific inhibitor; somatic cell; diagnosis; prevention;
 KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;
 KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;
 KW graft versus host disease; malignant cell removal; bone marrow; ss.
 XX Homo sapiens.
 XX WO9841648-A2.
 PN

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XX 24-SEP-1998.
XX 19-MAR-1998; 98WO-US005419.
XX 20-MAR-1997; 97US-0041057P.
XX (VARI-) VARIAGENICS INC.
XX Houseman D, Ledley FD, Stanton VP;
XX WPI; 1998-521232/44.
XX Identifying target genes for allele-specific drugs - used for diagnosis,
XX prevention and treatment of, e.g. cancers, atherosclerotic plaque,
XX dysplastic lesions, endometriosis or graft versus host disease.
XX Disclosure; Fig 7; 605pp; English.
XX This invention describes a novel method for identifying an inhibitor
XX potentially useful for treatment of cancer, where the inhibitor is active
XX on a gene vital for cell growth or viability, and where the gene is
XX subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
XX used for preventing the development of cancer in a patient having a
XX precancerous condition, by administering to the patient a first allele
XX specific inhibitor (ASI) targeted to an allele of a first essential gene
XX present in cells of the precancerous condition, where the normal somatic
XX cells of the patient are heterozygous for the first gene, the inhibitor
XX is active on at least one but less than all allelic forms of the gene
XX present in a population and targets only one allelic form present in the
XX normal somatic cells, and the first gene. The products and methods can be
XX used in the diagnosis, prevention and treatment of LOH disorders, e.g.
XX cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic
XX lesions, benign tumours, endometriosis, polycystic kidney disease, and
XX graft versus host disease. The method can also be used to remove
XX malignant cells from bone marrow transplants. AA225812-226825 represent
XX human polymorphic sites described in the method of the invention
XX Sequence 21 BP; 4 A; 9 C; 5 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 21;
XX Best Local Similarity 84.2%; Pred. No. 7.6e-02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 235 GGTGGTGGCGGAGTGACC 253
XX 20 GGTGGTGGCGGAGTGACC 2
XX
XX RESULT 825
XX AA226102
XX ID AA226102 standard; DNA; 21 BP.
XX AC AA226102;
XX
XX 30-NOV-1999 (first entry)
XX
XX Human polymorphic region 291.
XX Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;
XX cell viability; loss of heterozygosity; precancerous condition; ASI;
XX allele specific inhibitor; somatic cell; diagnosis; prevention;
XX atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;
XX dysplastic lesion; benign tumour; polycystic kidney disease; transplant;
XX graft versus host disease; malignant cell removal; bone marrow; ss.
XX Homo sapiens.
XX
XX WO9841648-A2.
XX
XX 24-SEP-1998.
XX
XX 19-MAR-1998; 98WO-US005419.
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XX 20-MAR-1997; 97US-0041057P.
XX (VARI-) VARIAGENICS INC.
XX Houseman D, Ledley FD, Stanton VP;
XX WPI; 1998-521232/44.
XX Identifying target genes for allele-specific drugs - used for diagnosis,
XX prevention and treatment of, e.g. cancers, atherosclerotic plaque,
XX dysplastic lesions, endometriosis or graft versus host disease.
XX Disclosure; Fig 7; 605pp; English.
XX This invention describes a novel method for identifying an inhibitor
XX potentially useful for treatment of cancer, where the inhibitor is active
XX on a gene vital for cell growth or viability, and where the gene is
XX subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
XX used for preventing the development of cancer in a patient having a
XX precancerous condition, by administering to the patient a first allele
XX specific inhibitor (ASI) targeted to an allele of a first essential gene
XX present in cells of the precancerous condition, where the normal somatic
XX cells of the patient are heterozygous for the first gene, the inhibitor
XX is active on at least one but less than all allelic forms of the gene
XX present in a population and targets only one allelic form present in the
XX normal somatic cells, and the first gene. The products and methods can be
XX used in the diagnosis, prevention and treatment of LOH disorders, e.g.
XX cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic
XX lesions, benign tumours, endometriosis, polycystic kidney disease, and
XX graft versus host disease. The method can also be used to remove
XX malignant cells from bone marrow transplants. AA225812-226825 represent
XX human polymorphic sites described in the method of the invention
XX Sequence 21 BP; 1 A; 5 C; 10 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 21;
XX Best Local Similarity 84.2%; Pred. No. 7.6e-02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 217 GCCTGGATGAGGTGGTG 235
XX 2 GCCTGGATGAGGTGGTG 20
XX
XX Db
XX
XX RESULT 826
XX AAX17882/c
XX ID AAX17882 standard; DNA; 21 BP.
XX AC AAX17882;
XX
XX 11-MAY-1999 (first entry)
XX
XX Anti-CMV oligonucleotide #2922.
XX
XX Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;
XX Cytomegalovirus; inhibition; replication; sugar modification;
XX phosphorothioate; infection; retinitis; ss.
XX
XX Synthetic.
XX Human herpesvirus 5.
XX
XX Key Location/Qualifiers
XX modified_base 1..21
XX /tag= a
XX /note= "contains phosphorothioate internucleotide
XX linkages"
XX
XX WO9845314-A1.
XX
XX 15-OCT-1998.
XX
XX 07-APR-1998; 98WO-US006895.
```

XX 09-APR-1997; 97US-00838715.
 XX (ISIS-) ISIS PHARM INC.
 XX Draper KG, Kisner DL, Anderson KP, Chapman S;
 XX WPI; 1998-568330/48.
 XX
 XX New antisense oligonucleotides that target cytomegalovirus nucleic acid -
 PT particularly including 2-methoxyethoxy sugar modifications, especially
 PT for treating viral retinitis, with long-lasting retention in the retina.
 XX
 XX Claim 2; Page 24; 99pp; English.
 XX
 XX Antisense oligonucleotides (AA17861-X17924) are targeted to a nucleic
 CC acid (AA17925-X17948) encoding IE (immediate early) 1 or 2, or DNA
 CC polymerase of cytomegalovirus (CMV) and are able to inhibit CMV
 CC replication. Optionally the oligonucleotides include at least one 2'-(2-
 CC methoxyethoxy) sugar modification or phosphorothioate internucleotide
 CC linkages. The oligonucleotides are used to inhibit CMV infections (by in
 CC vivo or in vitro contact with cells, tissues or body fluids), especially
 CC to treat or prevent CMV infections, particularly retinitis
 XX
 XX Sequence 21 BP; 0 A; 7 C; 4 G; 10 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 131 GGATGAGAGAGATCAACG 149
 Db 20 GCAAGAGAGAGACAAACG 2
 RESULT 827
 AAA07030
 ID AAA07030 standard; DNA; 21 BP.
 XX
 XX AAA07030;
 XX
 XX 03-JUL-2000 (first entry)
 XX
 XX Human integrin beta 3 quantitative real-time PCR primer, SEQ ID NO:3.
 DE
 XX Integrin beta 3; human endothelial glycoprotein; GP3A; GPIIb; ITGB3;
 KW DB1; platelet glycoprotein 3a; cellular adhesion; vitronectin receptor;
 KW fibronectin receptor; expression inhibition; antisense therapy;
 KW tumour formation; cancer invasion; bleeding disorder; inflammation;
 KW quantitative real-time PCR primer; ss.
 XX
 XX Homo sapiens.
 OS
 XX
 XX US6037176-A.
 XX
 XX 14-MAR-2000.
 XX
 XX 25-JUN-1999; 99US-00344520.
 XX
 XX 25-JUN-1999; 99US-00344520.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Bennett CF, Cowsett LM, Monia BP;
 XX WPI; 2000-246189/21.
 XX
 XX New antisense compound that inhibits human integrin beta3, useful e.g.
 PT for treating or preventing infection, inflammation and tumors.
 XX
 XX Example 13; Col 39; 33pp; English.
 PS
 XX Sequences AAA07029-A07030 represent human integrin beta 3 PCR primers

CC used in quantitative real-time PCR with probe AAA07031 in an
 CC exemplification of the present invention. The invention relates to
 CC antisense oligonucleotides targeted to the human integrin beta 3 gene,
 CC which inhibit its expression. A series of oligonucleotides (AAA07035-
 CC AAA07074) were designed to target different regions of the human integrin
 CC beta 3 RNA, and were analysed for their effect on integrin beta 3 mRNA
 CC levels by quantitative real-time PCR. GAPDH (glyceraldehyde-3-phosphate)
 CC mRNA levels were measured as a control. Integrins constitute one of four
 CC classes of cellular adhesion molecules, and play an important role in
 CC cell migration, cell anchorage to substrates and cytoadhesion signalling
 CC pathways. They are heterodimeric cation-dependent membrane glycoproteins
 CC composed of an alpha and beta subunit. Integrin beta 3 (also known as
 CC human endothelial glycoprotein, GP3A, GPIIb, ITGB3, CB61 and platelet
 CC glycoprotein 3a) is the common beta subunit partner of the members of the
 CC beta-3 subfamily of integrins. This family consists of the vitronectin
 CC receptor (alpha-v-beta-3) and the fibronectin receptor (alpha-Ib-beta-
 CC 3). Cells expressing this class of integrin can adhere to various matrix
 CC proteins and participate in various cytoadhesion-driven cellular
 CC responses. Integrin beta 3 is implicated in conditions such as vascular
 CC restenosis, excessive bone resorption, angiogenesis (in melanoma), tumour
 CC invasion, platelet aggregation and Glanzmann's thrombasthenia. The
 CC oligonucleotides of the invention are useful for diagnosis, prevention
 CC and treatment of conditions associated with integrin beta 3 expression,
 CC such as tumour formation, inflammation, infections and the diseases
 CC mentioned above
 XX
 SQ Sequence 21 BP; 5 A; 5 C; 6 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 614 CCTACATTAGCTGGACAA 632
 Db 1 CCGTCATTAGCTGGACAA 19
 RESULT 828
 AA259350/C
 ID AA259350 standard; DNA; 21 BP.
 XX
 XX AA259350;
 XX
 XX 05-APR-2000 (first entry)
 XX
 XX Human STP2 gene promoter polymorphism sequence 108.
 DE
 XX Single nucleotide polymorphism; SNP; STP2; phenol sulphotransferase;
 KW probe; genotyping; human; drug metabolism; ss.
 KW
 XX Homo sapiens.
 OS
 XX
 XX Key Location/Qualifiers
 FH Variation 11
 FT /tag= a
 FT /note= "Site of polymorphism"
 XX
 XX WO9964630-A1.
 XX
 XX 16-DEC-1999.
 XX
 XX 09-JUN-1999; 99WO-US013094.
 XX
 XX 10-JUN-1999; 98US-0088710P.
 XX
 XX (AXYS-) AXYS PHARM INC.
 XX
 XX Guida M, Kurth J;
 XX WPI; 2000-105892/09.
 XX
 XX Novel nucleic acid used for genotyping, e.g. to predict rate of drug
 PT metabolism.

XX Claim 2; Page 17; 46pp; English.

XX Sequences AAZ59305-259352 are fragments of the human STP2 gene. The

CC fragments are from the 8 exons, the promoter region, 3' and 5'

CC untranslated regions of the STP2 gene. Each sequence contains a newly

CC identified STP2 gene single nucleotide polymorphism (SNP). STP2 is a

CC phenol sulphotransferase. Substrates for STP2 include monoxidil,

CC acetaminophen, and paranthrophenol. Several of the nucleotide changes

CC identified at the polymorphism sites, give rise to an amino acid change.

CC Amino acid changes may result in altered enzyme activity. The sequences

CC can be used as probes for detecting STP2 polymorphisms. The polymorphic

CC probes are used in screening and genotyping, i.e. to predict the rate of

CC metabolism of STP2 substrates, potential drug-drug interactions and

CC adverse side effects. They can also be used to detect diseases resulting

CC from accidental or occupational exposure to toxins and to establish

CC animal, cell or in vitro models for drug metabolism

XX

XX Sequence 21 BP; 2 A; 9 C; 2 G; 8 T; 0 U; 0 Other;

SQ

Query Match 0.8%; Score 14.2; DB 1; Length 21;

Best Local Similarity 84.2%; Pred. No. 7.6e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 26 GAATGCAGAGTAGGCAGG 44

DB 19 GAAAGCTGAGATAGGCAGG 1

RESULT 829

AAZ73744/C

ID AAZ73744 standard; DNA; 21 BP.

XX

AC AAZ73744;

XX

DT 10-SEP-2001 (first entry)

XX

DE Human biallelic marker downstream amplification primer SEQ ID NO:8100.

XX

XX Human genome; biallelic marker; high density disequilibrium map;

XX genomic map; haplotype; phenotype; polymorphic base; genotyping;

XX haplotyping; hybridisation; identification; characterisation;

XX amplification; single nucleotide polymorphism; SNP; PCR primer;

XX diagnosis; ss.

XX

OS Homo sapiens.

XX

XX WO9954500-A2.

XX

XX 28-OCT-1999.

XX

XX 21-APR-1999; 99WO-IB000822.

XX

XX 21-APR-1998; 98US-0082614P.

XX

XX 23-NOV-1998; 98US-0109732P.

XX

XX (GENSET) GENSET.

XX

XX Cohen D, Blumenfeld M, Chumakov I;

XX

XX WPI; 2000-013267/01.

XX

XX Novel biallelic markers used to construct a high density disequilibrium

XX map of the human genome.

XX

XX Claim 8; Page 1957; 2745pp; English.

XX

XX AAZ65654 to AAZ69578 represent human biallelic markers from the present

XX invention, which contain a polymorphic base at position 24 of their

XX nucleotide sequences. AAZ69579 to AAZ77440 represent amplification

XX primers for the biallelic markers. The biallelic markers of the invention

XX have a variety of uses; they can be used for high density mapping of the

XX human genome, and in complex association studies and haplotyping studies

CC

CC which are useful in determining the genetic basis for disease states.

CC Compositions and methods of the invention can also be useful for the

CC identification of the targets for the development of pharmaceutical

CC agents and diagnostic methods, as well as the characterisation of the

CC differential efficacious responses to and side effects from

CC pharmaceutical agents acting on a disease as well as other treatment.

CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and

CC 3367, are not actually given a sequence in the Sequence Listing from the

CC present invention

XX

SQ Sequence 21 BP; 7 A; 4 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;

Best Local Similarity 84.2%; Pred. No. 7.6e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 392 CGATGAGGTGACGTCTCC 410

DB 21 CAGATGATTGACGTCTCC 3

RESULT 830

AAZ56234

ID AAZ56234 standard; DNA; 21 BP.

XX

AC AAZ56234;

XX

XX 15-MAR-2000 (first entry)

XX

DE Mutated Influenza virus NA gene sequence primer SEQ ID NO:1.

XX

XX Recombinant negative strand viral RNA template; virus particle;

XX RNA directed RNA polymerase complex; expression; chimeric virus; vaccine;

XX packaging; ss.

XX

OS Influenza virus.

OS Synthetic.

XX

XX US6001634-A.

XX

PD 14-DEC-1999.

XX

XX 29-JUN-1998; 98US-00106377.

XX

XX 28-AUG-1989; 89US-00399728.

XX

XX 21-NOV-1989; 89US-00440053.

XX

XX 22-MAY-1990; 90US-00527237.

XX

XX 04-AUG-1992; 92US-00925061.

XX

XX 01-FEB-1994; 94US-00190698.

XX

XX 01-JUN-1994; 94US-00252508.

XX

XX (PALE/) PALESE P.

XX (GARC/) GARCIA-SASTRE A.

XX

XX Palese P, Garcia-Sastre A;

XX

XX WPI; 2000-071660/06.

XX

XX Chimeric virus containing influenza virus RNA segments, useful for

XX expressing heterologous gene products in appropriate host cell systems.

XX

XX Example; Col 55; 67pp; English.

XX

XX The present invention describes a chimeric virus comprising influenza

XX virus containing a heterologous RNA segment from another strain of

XX influenza virus or 8 genomic segments from different strains of influenza

XX virus, with each segment comprising the reverse complement of a mRNA

XX coding sequence operatively linked to a binding site specific for an RNA-

XX directed RNA polymerase of a negative strand RNA virus. The recombinant

XX negative strand virus RNA templates may be used to express heterologous

XX gene products in appropriate host cell systems and/or to construct

XX recombinant viruses that express, package and/or present the heterologous

XX gene product. The expression products and chimeric viruses may be used in

CC

QY 719 AACATGAAGAGGGGCACC 737
 |||||
 Db 1 AACATTAGAGGTGCCACC 19

RESULT 833
 AAF96385
 ID AAF96385 standard; DNA; 21 BP.
 XX
 AC AAF96385;
 DT 06-JUN-2001 (first entry)
 XX
 DE Human gene single nucleotide polymorphism #1146.
 XX
 KW Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
 KM polymorphism; vascular disease; coronary artery disease; forensics;
 KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
 KW pulmonary embolism; paternity test; ds.
 XX
 OS Homo sapiens.
 XX
 Key Location/Qualifiers
 FT Variation replace(11,A)
 FT /*tag= a
 FT /standard_name= "single nucleotide polymorphism"

WO200118250-A2.
 XX
 XX 15-MAR-2001.
 XX
 XX 07-SEP-2000; 2000WO-US024503.
 XX
 XX 10-SEP-1999; 99US-0153357P.
 PR 28-JUL-2000; 2000US-0220947P.
 PR 16-AUG-2000; 2000US-0225724P.
 XX
 XX (WHEED) WHITEHEAD INST BIOMEDICAL RES.
 PA (MILL-) MILLENNIUM PHARM INC.
 XX
 XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GO, McCarthy JJ;
 PI WPT; 2001-226749/23.
 DR
 XX
 XX Nucleic acids comprising single nucleotide polymorphisms, useful in
 PT applications such as forensics, paternity testing, medicine, genetic
 PT analysis and phenotype correlations to diseases such as diabetes and
 PT atherosclerosis.
 XX
 XX Example; Page 130; 242pp; English.

XX The present invention provides a method of diagnosing a vascular disease
 CC in an individual, involving determining the sequence at various
 CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4
 CC genes. The sequences at a number of polymorphic sites are also provided
 CC in the specification. In particular, the method can be used in the
 CC diagnosis of atherosclerosis, myocardial infarction, coronary heart
 CC disease, stroke, peripheral vascular diseases, venous thromboembolism and
 CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
 CC useful in forensics, paternity testing, genetic analysis and phenotype
 CC correlations to diseases. The present sequence is an example of one of
 CC the human gene SNPs shown in the specification
 XX

SQ Sequence 21 BP; 5 A; 4 C; 7 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1167 GGGCTGCATCTTCATGAG 1185
 |||||
 Db 1 GGGCATCAGCTTCATGAG 19

RESULT 834
 AAH62348
 ID AAH62348 standard; DNA; 21 BP.
 XX
 AC AAH62348;
 DT 12-SEP-2001 (first entry)
 XX
 DE ATF3 polymorphism containing DNA fragment #249.
 XX
 KW Single nucleotide polymorphism; SNP; human; cancer; inflammation;
 KM heart disease; paternity testing; forensic science; ds.
 XX
 OS Homo sapiens.

XX
 Key Location/Qualifiers
 FT Variation replace(11,A)
 FT /*tag= a
 FT /standard_name= "single nucleotide polymorphism"

WO200138576-A2.
 XX
 XX 31-MAY-2001.
 XX
 XX 17-NOV-2000; 2000WO-US031639.
 XX
 XX 24-NOV-1999; 99US-0167334P.
 XX
 XX (WHEED) WHITEHEAD INST BIOMEDICAL RES.
 XX
 XX Cargill M, Ireland JS, Lander ES;
 PI WPI; 2001-367705/38.
 DR
 XX
 XX New nucleic acid segments of the human genome, particularly from genes
 PT including polymorphic sites, for phenotype correlation, forensics,
 PT paternity testing, medicine and genetic analysis.
 XX
 XX Claim 1; Page 49; 80pp; English.

XX DNA sequences AAH62100 - AAH62688 represent segments of human genes which
 CC contain single nucleotide polymorphisms (SNPs). A method is included in
 CC the invention for analysing a nucleic acid sample, which consists of
 CC determining the base occupying any one of the polymorphic sites given in
 CC the SNP containing sequences. The nucleotide sequences can be used in the
 CC diagnosis or monitoring of diseases, such as cancer, inflammation, heart
 CC diseases, diseases of the cardiovascular system, and infection by
 CC microorganisms. The oligonucleotides are also useful in the manufacture
 CC of a medicament for the treatment or prophylaxis of the diseases, and as
 CC a pharmaceutical. SNP containing oligonucleotides are useful in
 CC applications such as phenotype correlation, forensics, paternity testing,
 CC medicine and genetic analysis

XX SQ Sequence 21 BP; 3 A; 4 C; 11 G; 3 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 39 GGCAGGAGGACCCAGCAGTG 57
 |||||
 Db 1 GGCAGGAGGAGCCTGCAGTG 19

RESULT 835
 AAH62637
 ID AAH62637 standard; DNA; 21 BP.
 XX
 AC AAH62637;
 XX
 DT 12-SEP-2001 (first entry)

```
XX Opiate receptor like 1 polymorphism containing DNA fragment #538.
DE
XX
XX Single nucleotide polymorphism; SNP; human; cancer; inflammation;
KW heart disease; paternity testing; forensic science; ds.
XX
XX Homo sapiens.
OS
XX Key Location/Qualifiers
FH replace(11,T)
FT /*tag= a
FT /standard_name= "single nucleotide polymorphism"
XX
XX WO200138576-A2.
PN
XX
XX 31-MAY-2001.
PD
XX
XX 17-NOV-2000; 2000WO-US031639.
PF
XX
XX 24-NOV-1999; 99US-0167334P.
PR
XX
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
PA
XX Cargill M, Ireland JS, Lander ES;
PI
XX WPI; 2001-367705/38.
DR
XX New nucleic acid segments of the human genome, particularly from genes
PT including polymorphic sites, for phenotype correlation, forensics,
PT paternity testing, medicine and genetic analysis.
PT
XX Claim 1; Page 72; 80pp; English.
PS
XX
XX DNA sequences AAH62100 - AAH62688 represent segments of human genes which
CC contain single nucleotide polymorphisms (SNPs). A method is included in
CC the invention for analysing a nucleic acid sample, which consists of
CC determining the base occupying any one of the polymorphic sites given in
CC the SNP containing sequences. The nucleotide sequences can be used in the
CC diagnosis or monitoring of diseases, such as cancer, inflammation, heart
CC diseases, diseases of the cardiovascular system, and infection by
CC microorganisms. The oligonucleotides are also useful in the manufacture
CC of a medicament for the treatment or prophylaxis of the diseases, and as
CC a pharmaceutical. SNP containing oligonucleotides are useful in
CC applications such as phenotype correlation, forensics, paternity testing,
CC medicine and genetic analysis.
XX
XX Sequence 21 BP; 3 A; 6 C; 8 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 7.6e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 923 TGTTCAGCTGCTCCGTGG 941
DB 2 TGATCCGGCGCTCCGTGG 20
RESULT 836
AAF75649
ID AAF75649 standard; DNA; 21 BP.
XX
XX AAF75649;
AC
XX
XX 10-MAY-2001 (first entry)
DT
XX
XX Murine ztrypl1 coding sequence PCR primer ZC18.365.
DE
XX Mouse; ztrypl1; serine protease; trypsin; inflammation; fertilisation;
KW cardiovascular disease; infertility; asthma; immune disorder; stroke;
KW gastrointestinal disorder; testicular function; contraceptive;
KW PCR primer; ss.
XX
XX Mus musculus.
OS
```

```
XX WO200112788-A2.
PN
XX
XX 22-FEB-2001.
PD
XX
XX 09-AUG-2000; 2000WO-US022156.
PF
XX
XX 18-AUG-1999; 99US-00376445.
PR
XX (ZYMO ) ZYMOGENETICS INC.
PA
XX Presnell SR, Taft DW;
XX
XX WPI; 2001-202859/20.
DR
XX
XX New mouse serine protease polypeptides ztrypl and polynucleotides, useful
PT for treating cardiovascular disease, infertility, impotence and other
PT male reproductive dysfunction.
PT
XX Example 1; Page 102; 112pp; English.
PS
XX The present invention provides the protein and coding sequences of the
CC human and murine serine protease ztrypl. This is a tryptase like protein
CC which is highly expressed in contractile tissues. The sequences can be
CC used in the treatment and identification of treatments for cardiovascular
CC disease, inflammation, infertility, male reproductive dysfunction,
CC asthma, stroke, immune disorders and gastrointestinal disorders. In
CC addition, they can be used to modulate testicular function and as
CC contraceptives.
XX
XX Sequence 21 BP; 1 A; 9 C; 4 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 7.6e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 1195 GCGCGTCCCTCTTTCGG 1213
DB 2 GCGTGTCCCTCTTTCGTG 20
RESULT 837
AAF90246/c
ID AAF90246 standard; DNA; 21 BP.
XX
XX AAF90246;
AC
XX
XX 06-AUG-2001 (first entry)
DT
XX
XX PCR primer for UDP-glucose:aglycon-glucosyltransferase DNA probe.
DE
XX
XX UDP-glucose:aglycon-glucosyltransferase; UDP-GAG; cyanohydrin; terpenoid;
KW glucose; transgenic plant; cyanogenic glucoside biosynthesis;
KW pathogen resistance; herbivore response; PCR primer; ss.
XX
XX Sorghum bicolor.
OS
XX
XX WO200140491-A2.
PN
XX
XX 07-JUN-2001.
PD
XX
XX 29-NOV-2000; 2000WO-EP011982.
PF
XX
XX 01-DEC-1999; 99EP-00123838.
PR
XX (LUMI-) LUMINIS PTY LTD.
PA (UYRO-) UNIV ROYAL VETERINARY & AGRIC.
XX
XX Hoej P, Moeller BL, Jones PR;
PI
XX WPI; 2001-374846/39.
DR
XX
XX DNA molecule coding for UDP-glucose:aglycon-glucosyltransferase
PT
```

PT conjugating cyanohydrin, terpenoid or phenyl derivative to glucose, for
PT producing transgenic plants having modified cyanogenic glucoside
PT biosynthesis.
XX
XX
PS Example 4; Page 17; 31pp; English.
XX
CC PCR primers AAF90246-47 were used to amplify a DNA probe for DNA encoding
CC a UDP-glucose:aglycon-glucosyltransferase (UDP-GAG) polypeptide. The
CC enzyme conjugates a cyanohydrin, terpenoid, phenyl derivative or
CC hexanoderivative to glucose. UDP-GAG polynucleotides are useful for
CC producing transgenic plants having modified cyanogenic glucoside
CC biosynthesis. Constitutive, inducible or tissue-specific expression of
CC UDP-GAG is useful for obtaining transgenic cyanogenic plants with altered
CC resistance to pathogens and herbivore responses
XX
XX Sequence 21 BP; 3 A; 5 C; 13 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 7.6e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 552 GCCCTCAGCGCGCTC 570
Db 19 GCCCGCGCGCTGCGCTC 1
RESULT 838
AAF87687/C
ID AAF87687 standard; DNA; 21 BP.
XX
AC AAF87687;
XX
DT 16-JUL-2001 (first entry)
XX
DE Human RecQ5 type DNA helicase sequencing primer 501.
XX
XX Human; RecQ5 alpha; RecQ5 beta; RecQ5 gamma; DNA helicase;
KW alternative splicing; chromosomal instability; primer; ss.
KW
XX Homo sapiens.
OS
XX
XX WO200125425-A1.
XX
XX 12-APR-2001.
XX
XX 25-AUG-2000; 2000WO-JP005757.
XX
XX 05-OCT-1999; 99JP-00284001.
XX
XX (AGEN-) AGENE RES INST CO LTD.
XX
XX Furuichi Y, Shimamoto A, Kitao S, Nishikawa K;
XX WPI; 2001-273577/28.
XX
XX Polynucleotide encoding for RecQ5beta helicase useful for diagnosis and
PT treatment of chromosomal instability.
PT
XX
XX
PS Example 2; Page 32; 97pp; Japanese.
XX
CC The present sequence is a primer used to sequence a polynucleotide
CC encoding a human RecQ5 type DNA helicase. The three RecQ5 type helicases
CC alpha, beta and gamma are formed by alternative splicing. The invention
CC discloses the RecQ5 type DNA helicases beta and gamma, and the genes
CC encoding them. The RecQ5 beta DNA helicase has a novel characteristic of
CC being localised in the nucleus. It is useful as a diagnostic marker or in
CC the treatment of diseases associated with chromosomal instability
XX
XX Sequence 21 BP; 6 A; 2 C; 9 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 7.6e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 552 GCCCTCAGCGCGCTC 570
Db 19 GCCCGCGCGCTGCGCTC 1

QY 823 AAGTCCCTCACCCCTGTCT 841
Db 20 AAGTGCCTCACCCCTTTCT 2
RESULT 839
AAC86918/C
ID AAC86918 standard; RNA; 21 BP.
XX
AC AAC86918;
XX
DT 02-APR-2001 (first entry)
XX
DE Critical sequence of a ribozyme targeting the oestrogen receptor.
XX
XX Ribozyme; oestrogen-dependent tumour; cell proliferation; glucocorticoid;
KW DNA-binding domain; oestrogen receptor; cancer treatment; breast cancer;
KW ss.
XX
OS Synthetic.
XX
XX WO2000074485-A1.
XX
XX 14-DEC-2000.
XX
XX 02-JUN-2000; 2000WO-US015243.
XX
XX 04-JUN-1999; 99US-0137470P.
XX
XX (TEXA) UNIV TEXAS.
XX
XX Roy AK, Lavrovsky Y, Tyagi RK, Song CS, Chatterjee B;
XX WPI; 2001-061633/07.
XX
XX Ribozyme having a high substrate specificity for an mRNA encoding a DNA-
PT binding domain of human estrogen receptor, useful for inhibiting estrogen
PT -dependent tumor cell proliferation, particularly breast cancer.
XX
XX Claim 4; Page 6; 49pp; English.
XX
XX The specification describes a ribozyme capable of inhibiting oestrogen-
CC dependent tumor cell proliferation and having a high substrate
CC specificity for an mRNA sequence encoding a DNA-binding domain of human
CC oestrogen receptor. The ribozyme is free of endonuclease activity for an
CC mRNA having a DNA binding domain of a glucocorticoid. The oestrogen
CC receptor site-specific ribozymes are useful for cancer treatment and
CC therapies, especially for inhibiting oestrogen-dependent tumour cell
CC proliferation, particularly breast cancer. The present sequence represents
CC the critical sequence of a ribozyme of the invention, which targets the
CC the DNA binding domain of a human oestrogen receptor
XX
XX Sequence 21 BP; 7 A; 3 C; 8 G; 0 T; 3 U; 0 Other;
SQ
Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 7.6e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1571 ACTCAGCGAGCGCGCTTT 1589
Db 19 ACTCAGCGAGCGCTTCTTT 1
RESULT 840
AAD09996/C
ID AAD09996 standard; DNA; 21 BP.
XX
XX AAD09996;
XX
XX 12-SEP-2001 (first entry)
XX
XX Mus musculus goosecoid exon 2 DNA amplifying exon 2 forward PCR primer.
DE

XX Mouse; fertility; reproduction; gametogenesis; microinjection; infection;
KW goosoid gene; PCR primer; embryogenesis; ss.
XX
XX Mus musculus.
OS
XX WO200148224-A1.
PN
XX
XX 05-JUL-2001.
PD
XX
XX 22-DEC-2000; 2000WO-AU001596.
PF
XX
XX 24-DEC-1999; 99AU-00004884.
PR
XX
XX (CSIR) COMMONWEALTH SCI & IND RES ORG.
PA
XX
XX Thresher R, Hinds L, Hardy C, Whyard S, Vignarajan S, Grewe PM;
PI Patil J;
PI
XX WPI; 2001-425672/45.
DR
XX
XX Novel construct for preventing embryogenesis in animals comprises native
XX promoter, blocking DNA which abrogates function of crucial gene and
XX genetic switch to regulate expression/repression of blocker/gene
XX knockout.
XX
XX Example 13; Page 104; 241pp; English.
XX
XX The invention relates to a construct which allows animals to be bred in
XX captivity but renders them infertile in the wild by allowing reversible
XX control over fertility and reproduction. The construct comprises a native
XX promoter, a blocking DNA sequence contoured for and designed to abrogate
XX a crucial gene's function or to cause its mis-expression, and a genetic
XX switch to regulate controlled expression/repression of the blocker/gene
XX knockout. The construct is useful for preventing embryogenesis or
XX gametogenesis in animals by stably transforming an animal cell with the
XX construct by microinjection, transfection or infection, where the
XX construct stably integrates into the genome by homologous recombination,
XX and implanting the cell into a host organism, where a whole animal
XX develops from the implanted cell. The present sequence is a PCR primer
XX used for amplifying mouse goosoid exon 2 DNA
XX
XX Sequence 21 BP; 2 A; 7 C; 7 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 7.6e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1328 AGTACGAGCGGAGCCCT 1346
DB 21 AGTACGAGCGGAGCCCT 3
RESULT 841
ABK65778
ID ABK65778 standard; DNA; 21 BP.
XX
XX ABK65778;
AC
XX
XX 02-JUL-2002 (first entry)
DT
XX
XX Human single nucleotide polymorphism #398.
DE
XX
XX Human; single nucleotide polymorphism; SNP; sickle cell anaemia;
KW agammaglobulinaemia; diabetes insipidus; Lesch-Nyhan syndrome;
KW muscular dystrophy; Wiskott-Aldrich syndrome; Fabry's disease;
KW familial hypercholesterolaemia; polycystic kidney disease; cancer;
KW hereditary spherocytosis; Von Willebrand's disease; tuberculous sclerosis;
KW hereditary haemorrhagic telangiectasia; familial colonic polyposis;
KW Ehlers-Danlos syndrome; osteogenesis imperfecta; autoimmune disease;
KW acute intermittent porphyria; inflammation; nervous system disorder;
KW infection; rheumatoid arthritis; multiple sclerosis; diabetes;
KW systemic lupus erythematosus; Graves disease; longevity; obesity;
KW

KW baldness; fertility; forensic; paternity testing; ss.
XX
XX Homo sapiens.
OS
XX US2002037508-A1.
PN
XX
XX 28-MAR-2002.
PD
XX
XX 18-JAN-2001; 2001US-00765081.
PF
XX
XX 19-JAN-2000; 2000US-0176861P.
PR
XX
XX (CARG/) CARGILL M.
PA
XX (IREL/) IRELAND J S.
PA
XX (LAND/) LANDER E S.
PA
XX
XX Cargill M, Ireland JS, Lander ES;
PI
XX WPI; 2002-315108/35.
DR
XX
XX Nucleic acid comprising single nucleotide polymorphisms, useful in
XX forensics, paternity testing and diagnosis of disease.
PT
XX
XX Claim 1; Page 86; 96pp; English.
PS
XX
XX The invention relates to a nucleic acid comprising single nucleotide
XX polymorphisms (SNPs) associated with diseases. The nucleic acids
XX comprising the SNPs and probes and primers for detecting them may be used
XX in assays for the diagnosis of diseases associated with SNPs (such as
XX sickle cell anaemia, agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan
XX syndrome, muscular dystrophy, Wiskott-Aldrich syndrome, Fabry's disease,
XX familial hypercholesterolaemia, polycystic kidney disease, hereditary
XX haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos
XX syndrome, osteogenesis imperfecta, and acute intermittent porphyria,
XX symptoms of, or susceptibility to, multifactorial diseases of which a
XX component is or may be genetic, such as autoimmune diseases, of which a
XX inflammation, cancer, diseases of the nervous system, and infection by
XX pathogenic microorganisms, autoimmune diseases including rheumatoid
XX arthritis, multiple sclerosis, diabetes (insulin-dependent and non-
XX independent), systemic lupus erythematosus and Graves disease, cancers
XX including cancers of the bladder, brain, breast, colon, oesophagus,
XX kidney, leukaemia, liver, lung, oral cavity, ovary, pancreas, prostate,
XX skin, stomach and uterus, longevity, appearance (e.g., baldness,
XX obesity), strength, speed, endurance, fertility, and susceptibility or
XX receptivity to particular drugs or therapeutic treatments), in forensics
XX and in paternity testing. ABK65981-ABK65841 represent human single
XX nucleotide polymorphisms of the invention
XX
XX Sequence 21 BP; 4 A; 11 C; 2 G; 3 T; 0 U; 1 Other;
SQ
Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 7.6e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1382 CCGACCTCTCTCACCACGCT 1400
DB 1 CCGAGCTCTTACCACCT 19
RESULT 842
ABK65823/C
ID ABK65823 standard; DNA; 21 BP.
XX
XX ABK65823;
AC
XX
XX 02-JUL-2002 (first entry)
DT
XX
XX Human single nucleotide polymorphism #443.
DE
XX
XX Human; single nucleotide polymorphism; SNP; sickle cell anaemia;
KW agammaglobulinaemia; diabetes insipidus; Lesch-Nyhan syndrome;
KW muscular dystrophy; Wiskott-Aldrich syndrome; Fabry's disease;
KW

KW familial hypercholesterolaemia; polycystic kidney disease; cancer;
KW hereditary spherocytosis; Von Willebrand's disease; tuberous sclerosis;
KW hereditary haemorrhagic telangiectasia; familial colonic polyposis;
KW Ehlers-Danlos syndrome; osteogenesis imperfecta; autoimmune disease;
KW acute intermittent porphyria; inflammation; nervous system disorder;
KW infection; rheumatoid arthritis; multiple sclerosis; diabetes;
KW systemic lupus erythematosus; Graves disease; longevity; obesity;
KW baldness; fertility; forensic; paternity testing; ss.
XX
OS Homo sapiens.
XX
XX US2002037508-A1.
XX
XX 28-MAR-2002.
XX
XX 18-JAN-2001; 2001US-00765081.
XX
XX 19-JAN-2000; 2000US-0176861P.
XX
XX (CARG/) CARGILL M.
XX (IREL/) IRELAND J S.
XX (LAND/) LANDER E S.
XX
XX Cargill M, Ireland JS, Lander ES;
XX
XX WPI; 2002-315108/35.
XX
XX Nucleic acid comprising single nucleotide polymorphisms, useful in
XX forensics, paternity testing and diagnosis of disease.
XX
XX Claim 1; Page 92; 96pp; English.
XX
XX The invention relates to a nucleic acid comprising single nucleotide
XX polymorphisms (SNPs) associated with diseases. The nucleic acids
XX comprising the SNPs and probes and primers for detecting them may be used
XX in assays for the diagnosis of diseases associated with SNPs (such as
XX sickle cell anaemia, agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan
XX syndrome, muscular dystrophy, Wiskott-Aldrich syndrome, Fabry's disease,
XX familial hypercholesterolaemia, polycystic kidney disease, hereditary
XX spherocytosis, Von Willebrand's disease, tuberous sclerosis, hereditary
XX haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos
XX syndrome, osteogenesis imperfecta, and acute intermittent porphyria,
XX symptoms of, or susceptibility to, multifactorial diseases of which a
XX component is or may be genetic, such as autoimmune diseases,
XX inflammation, cancer, diseases of the nervous system, and infection by
XX pathogenic microorganisms, autoimmune diseases including rheumatoid
XX arthritis, multiple sclerosis, diabetes (insulin-dependent and non-
XX independent), systemic lupus erythematosus and Graves disease, cancers
XX including cancers of the bladder, brain, breast, colon, oesophagus,
XX kidney, leukaemia, liver, lung, oral cavity, ovary, pancreas, prostate,
XX skin, stomach and uterus, longevity, appearance (e.g., baldness,
XX obesity), strength, speed, endurance, fertility, and susceptibility or
XX receptivity to particular drugs or therapeutic treatments), in forensics
XX and in paternity testing. ABK6581-ABK6584 represent human single
XX nucleotide polymorphisms of the invention
XX
XX Sequence 21 BP; 6 A; 5 C; 7 G; 2 T; 0 U; 1 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 76.2%; Pred. No. 7.6e+02;
Matches 16; Conservative 1; Mismatches 4; Indels 0; Gaps 0;
Qy 201 TGCCCTTGAGCAGATAGGCT 221
Db 21 TGCCCTTGAGTCTATGTGCT 1
RESULT 843
ABK40345
ID ABK40345 standard; DNA; 21 BP.
XX
AC ABK40345;
XX

DT 15-JUL-2002 (first entry)
XX Forward PCR primer for human PRO4316 DNA.
DE
XX Human; PRO; benign tumour; malignant tumour; lymphoid malignancy;
KW leukaemia; neuronal disorder; stromal disorder; blastocoele disorder;
KW inflammatory disorder; immune disorder; angiogenic disorder; cytostatic;
KW neuroprotective; PCR; primer; ss.
XX
OS Homo sapiens.
XX
XX WO200153486-A1.
XX
XX 26-JUL-2001.
XX
XX 11-FEB-2000; 2000WO-US003565.
XX
XX 08-MAR-1999; 99WO-US005028.
XX 11-MAR-1999; 99US-0133972P.
XX 11-MAY-1999; 99US-0133459P.
XX 02-JUN-1999; 99WO-US012252.
XX 22-JUN-1999; 99US-0140650P.
XX 22-JUN-1999; 99US-0140653P.
XX 26-JUL-1999; 99US-0144758P.
XX 26-JUL-1999; 99US-0145688P.
XX 17-AUG-1999; 99US-0146222P.
XX 17-AUG-1999; 99US-0149395P.
XX 31-AUG-1999; 99US-0151689P.
XX 01-SEP-1999; 99WO-US020111.
XX 15-SEP-1999; 99WO-US021090.
XX 30-NOV-1999; 99WO-US028313.
XX 01-DEC-1999; 99WO-US028301.
XX 01-DEC-1999; 99WO-US028634.
XX 05-JAN-2000; 2000WO-US000219.
XX
XX (GETH) GENENTECH INC.
XX
XX Ashkenazi AJ, Goddard A, Godowski PJ, Gurney AL, Hillan KJ;
XX Marsters SA, Pan J, Pitti RM, Roy MA, Smith V, Stone DW;
XX Watanabe CK, Wood WI;
XX
XX WPI; 2002-205567/26.
XX
XX Thirty five nucleic acids encoding PRO polypeptides, useful for treating
XX benign or malignant tumors, leukemias and lymphoid malignancies,
XX inflammatory, angiogenic and immunologic disorders.
XX
XX Example 24; Page 136; 302pp; English.
XX
XX The present invention relates to the isolation of novel human PRO
XX polypeptides (AAU86128-AAU86162) and the polynucleotide sequences
XX encoding them. The PRO polypeptides, agonists, antagonists or anti-PRO
XX antibodies are useful for treating benign or malignant tumours (e.g.
XX renal, kidney, bladder, breast, etc), leukaemias and lymphoid
XX malignancies, other disorders such as neuronal, glial, astrocytal,
XX hypothalamic, glandular, macrophagal, stromal and blastocoele disorders,
XX inflammatory, immune and angiogenic disorders. The polynucleotide
XX sequences are also useful in gene therapy. The present sequence
XX represents a PCR primer used in the methods of the present invention
XX
XX Sequence 21 BP; 6 A; 5 C; 8 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 7.6e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 507 GGGCTACTCTGGAGAGCTG 525
Db 2 GGACGACGAGGAGAGCTG 20
RESULT 844
ABS60153/c

PS Disclosure; Page 722; 977pp; English.

XX The invention relates to an isolated nucleic acid from a human gene
 CC encoding aminopeptidase P (XPNP2), bradykinin receptor B1 (BDKRB1),
 CC tachykinin receptor B1 (TACR1), C1 esterase inhibitor (C1NH), kallikrein
 CC 1 (K1), bradykinin receptor B2 (BDKRB2), angiotensin converting enzyme
 CC 2 (ACE2) or protease inhibitor 4 (PI4), comprising at least one
 CC polymorphic position. Also included are (1) a probe that hybridises to a
 CC nucleotide polymorphism comprising additional 5' and 3' flanking genomic
 CC sequence; (2) analysing (M1) at least one nucleic acid sample comprising
 CC nucleic acid sequence at one or more polymorphic positions in a gene
 CC encoding a protein selected from the group above; (3) constructing (M2)
 CC haplotypes using the genes comprising grouping at least two nucleic acids
 CC : (4) identifying (M3) an individual at risk of developing a disorder
 CC upon administration of an ACE inhibitor and/or vasoconstrictor inhibitor
 CC using the polymorphic data; (5) a library of nucleic acids, each of which
 CC comprises one or more polymorphic positions within a gene encoding a
 CC human protein selected from the group above; and (6) genotyping (M4) an
 CC individual comprising obtaining a nucleic acid sample, determining the
 CC nucleotide present in at least one polymorphic position, and comparing at
 CC least one position with a known data set. The genes, (M1, M2, M3 and M4)
 CC and compositions are useful for detecting, diagnosing, treating,
 CC preventing various disorders such as angioedema and diseases which
 CC involve angiogenesis like haemangiomas, tumours, sarcomas, Crohn's
 CC disease, trachomas, and cardiovascular diseases like angina pectoris,
 CC hypertension, heart failure, myocardial infarction, ventricular
 CC hypertrophy, vascular diseases, aneurysm, embolism, thrombosis, coronary
 CC artery disease, arteriosclerosis and/or atherosclerosis, and
 CC hypersensitivity reactions, sepsis, autoimmune diseases, inflammatory
 CC obstructive pulmonary disease (COPD) and enterocolitis (many other
 CC diseases and disorders are listed in the specification). The
 CC polynucleotides are also useful for chromosome identification. Antibodies
 CC against the proteins may be utilised for immunophenotyping of cell lines
 CC and biological samples. The present sequence is included in the sequence
 CC listing but is not referred to anywhere else in the specification

XX Sequence 21 BP; 5 A; 4 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1537 AAGGAGGCCACCTTCGGT 1555

DB 2 AAGGTGGACACCTTCGGT 20

RESULT 846

ABS60249

ID ABS60249 standard; DNA; 21 BP.

AC ABS60249;

DT 05-NOV-2002 (first entry)

DE Human polymorphism associated DNA sequence #143.

XX Aminopeptidase P; XPNP2; bradykinin receptor B1; ds; BDKRB1;
 KW tachykinin receptor B1; TACR1; C1 esterase inhibitor; C1NH; kallikrein 1;
 KW K1; bradykinin receptor B2; BDKRB2; gene therapy;
 KW angiotensin converting enzyme 2; ACE2; protease inhibitor 4; PI4;
 KW polymorphism; haemangioma; tumour; sarcoma; Crohn's disease; trachoma;
 KW cardiovascular disease; angina pectoris; hypertension; heart failure;
 KW myocardial infarction; ventricular hypertrophy; vascular disease;
 KW aneurysm; embolism; thrombosis; coronary artery disease; angioedema;
 KW arteriosclerosis; atherosclerosis; hypersensitivity; sepsis;
 KW autoimmune disease; inflammatory arthritis; cancer; wound;
 KW viral infection; bacterial infection; fungal infection; COPD;
 KW Chronic obstructive pulmonary disease; enterocolitis.

OS Homo sapiens.

PN WO200261131-A2.

PD 08-AUG-2002.

PF 03-DEC-2001; 2001WO-US047235.

PR 04-DEC-2000; 2000US-0251015P.

PR 23-JAN-2001; 2001US-0263678P.

PR 02-MAR-2001; 2001US-0273037P.

XX (BRIM) BRISTOL-MYERS SQUIBB CO.

PA (TSUC/) TSUCHIHASHI Z.

PA (HUIL/) HUI L.

PI Tsuchihashi Z, Hui L, Zerba KB, Ma-Edmonds M, Perrone MH;

PI Swanson BN, Powell JR;

XX WPI; 2002-619265/66.

XX New isolated nucleic acid with at least one polymorphic position, useful
 PT for detecting, diagnosing and treating disorders such as angioedema,
 PT cancer, viral, bacterial or fungal infection, cardiovascular and
 PT autoimmune diseases.

PS Disclosure; Page 721; 977pp; English.

XX The invention relates to an isolated nucleic acid from a human gene
 CC encoding aminopeptidase P (XPNP2), bradykinin receptor B1 (BDKRB1),
 CC tachykinin receptor B1 (TACR1), C1 esterase inhibitor (C1NH), kallikrein
 CC 1 (K1), bradykinin receptor B2 (BDKRB2), angiotensin converting enzyme
 CC 2 (ACE2) or protease inhibitor 4 (PI4), comprising at least one
 CC polymorphic position. Also included are (1) a probe that hybridises to a
 CC nucleotide polymorphism comprising additional 5' and 3' flanking genomic
 CC sequence; (2) analysing (M1) at least one nucleic acid sample comprising
 CC nucleic acid sequence at one or more polymorphic positions in a gene
 CC encoding a protein selected from the group above; (3) constructing (M2)
 CC haplotypes using the genes comprising grouping at least two nucleic acids
 CC : (4) identifying (M3) an individual at risk of developing a disorder
 CC upon administration of an ACE inhibitor and/or vasoconstrictor inhibitor
 CC using the polymorphic data; (5) a library of nucleic acids, each of which
 CC comprises one or more polymorphic positions within a gene encoding a
 CC human protein selected from the group above; and (6) genotyping (M4) an
 CC individual comprising obtaining a nucleic acid sample, determining the
 CC nucleotide present in at least one polymorphic position, and comparing at
 CC least one position with a known data set. The genes, (M1, M2, M3 and M4)
 CC and compositions are useful for detecting, diagnosing, treating,
 CC preventing various disorders such as angioedema and diseases which
 CC involve angiogenesis like haemangiomas, tumours, sarcomas, Crohn's
 CC disease, trachomas, and cardiovascular diseases like angina pectoris,
 CC hypertension, heart failure, myocardial infarction, ventricular
 CC hypertrophy, vascular diseases, aneurysm, embolism, thrombosis, coronary
 CC artery disease, arteriosclerosis and/or atherosclerosis, and
 CC hypersensitivity reactions, sepsis, autoimmune diseases, inflammatory
 CC arthritis, cancer, wounds, viral, bacterial or fungal infection, Chronic
 CC obstructive pulmonary disease (COPD) and enterocolitis (many other
 CC diseases and disorders are listed in the specification). The
 CC polynucleotides are also useful for chromosome identification. Antibodies
 CC against the proteins may be utilised for immunophenotyping of cell lines
 CC and biological samples. The present sequence is included in the sequence
 CC listing but is not referred to anywhere else in the specification

SQ Sequence 21 BP; 5 A; 4 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;

Best Local Similarity 84.2%; Pred. No. 7.6e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1537 AAGGAGGCCACCTTCGGT 1555

||||| ||||| ||||| ||||| |||||

Db 2 AAGGTGGACAGCTTCGGT 20

RESULT 847

ABS60767/c

ID ABS60767 standard; DNA; 21 BP.

XX AC ABS60767;

XX 05-NOV-2002 (first entry)

XX Human polymorphism associated DNA sequence #404.

DE Amino peptidase P; XNPEP2; bradykinin receptor B1; ds; BDKRB1;

XX tachykinin receptor B1; TACR1; C1 esterase inhibitor; C1NH; kallikrein 1;

KW KLK1; bradykinin receptor B2; BDKRB2; gene therapy;

KW angiotensin converting enzyme 2; ACE2; protease inhibitor 4; PI4;

KW polymorphism; haemangioma; tumour; sarcoma; Crohn's disease; trachoma;

KW cardiovascular disease; angina pectoris; hypertension; heart failure;

KW myocardial infarction; ventricular hypertrophy; vascular disease;

KW aneurysm; embolism; thrombosis; coronary artery disease; angioedema;

KW arteriosclerosis; atherosclerosis; hypersensitivity; sepsis;

KW autoimmune disease; inflammatory arthritis; cancer; wound;

KW viral infection; bacterial infection; fungal infection; COPD;

KW Chronic obstructive pulmonary disease; enterocolitis.

XX OS Homo sapiens.

XX WO200261131-A2.

XX 08-AUG-2002.

XX 03-DEC-2001; 2001WO-US047235.

XX 04-DEC-2000; 2000US-025101SP.

PR 23-JAN-2001; 2001US-0263678P.

PR 02-MAR-2001; 2001US-0273037P.

XX (BRIM) BRISTOL-MYERS SQUIBB CO.

PA (TSUC/) TSUCHIHASHI Z.

PA (HUI/) HUI L.

XX Tsuchihashi Z, Hui L, Zerba KB, Ma-Edmonds M, Perrone MH;

PI Swanson BN, Powell JR;

PI WPI; 2002-619265/66.

DR New isolated nucleic acid with at least one polymorphic position, useful

XX for detecting, diagnosing and treating disorders such as angioedema,

PT cancer, viral, bacterial or fungal infection, cardiovascular and

PT autoimmune diseases.

XX Disclosure; Page 876; 977pp; English.

XX The invention relates to an isolated nucleic acid from a human gene

CC encoding aminopeptidase P (XNPEP2), bradykinin receptor B1 (BDKRB1),

CC tachykinin receptor B1 (TACR1), C1 esterase inhibitor (C1NH), kallikrein

CC 1 (KLK1), bradykinin receptor B2 (BDKRB2), angiotensin converting enzyme

CC 2 (ACE2) or protease inhibitor 4 (PI4), comprising at least one

CC polymorphic position. Also included are (1) a probe that hybridises to a

CC polymorphic position as provided in the detailed summary of single

CC nucleotide polymorphisms comprising additional 5' and 3' flanking genomic

CC sequence; (2) analysing (M1) at least one nucleic acid sample comprising

CC obtaining the sample from one or more individuals and determining the

CC nucleic acid sequence at one or more polymorphic positions in a gene

CC encoding a protein selected from the group above; (3) constructing (M2)

CC haplotypes using the genes comprising grouping at least two nucleic acids

CC ; (4) identifying (M3) an individual at risk of developing a disorder

CC upon administration of an ACE inhibitor and/or vasopressinase inhibitor

CC using the polymorphic data; (5) a library of nucleic acids, each of which

CC comprises one or more polymorphic positions within a gene encoding a

CC human protein selected from the group above; and (6) genotyping (M4) an

CC individual comprising obtaining a nucleic acid sample, determining the

CC

CC nucleotide present in at least one polymorphic position, and comparing at

CC least one position with a known data set. The genes, (M1, M2, M3 and M4)

CC and compositions are useful for detecting, diagnosing, treating,

CC preventing various disorders such as angioedema and diseases which

CC involve angiogenesis like haemangiomas, tumours, sarcomas, Crohn's

CC disease, trachomas, and cardiovascular diseases like angina pectoris,

CC hypertension, heart failure, myocardial infarction, ventricular

CC hypertrophy, vascular diseases, aneurysm, embolism, thrombosis, coronary

CC artery disease, arteriosclerosis and/or atherosclerosis, and

CC hypersensitivity reactions, sepsis, autoimmune diseases, inflammatory

CC arthritis, cancer, wounds, viral, bacterial or fungal infection, Chronic

CC obstructive pulmonary disease (COPD) and enterocolitis (many other

CC diseases and disorders are listed in the specification). The

CC polymucleotides are also useful for chromosome identification. Antibodies

CC against the proteins may be utilised for immunophenotyping of cell lines

CC and biological samples. The present sequence is included in the sequence

CC listing but is not referred to anywhere else in the specification

XX

SQ Sequence 21 BP; 7 A; 5 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.88; Score 14.2; DB 1; Length 21;

Best Local Similarity 84.2%; Pred. No. 7.6e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1246 TTCGTCATCTTAGGACCC 1264

|||||

Db 21 TTCAGTGTCTTGGACCC 3

RESULT 848

ABQ61245

ID ABQ61245 standard; DNA; 21 BP.

XX AC ABQ61245;

XX 03-OCT-2002 (first entry)

XX Human aquaporin 5 (AQP5) gene PCR primer 3.

XX Human; ss; PCR; primer; aquaporin; AQP5; AQP; water channel protein;

KW oligonucleotide chip; OGN chip; cDNA chip; lung cancer;

KW mutation detection; polymorphism detection; gene expression.

XX Homo sapiens.

XX WO200220787-A1.

XX 14-MAR-2002.

XX 10-SEP-2001; 2001WO-KR001528.

XX 09-SEP-2000; 2000KR-00053821.

XX (GOOD-) GOODGENE INC.

PA (MOON/) MOON W.

PA (MOON/) MOON C.

XX Moon W, Moon C, Moon Y, Kim B, Kim D, Shin C, Um T, Kim H;

PI Song M, Kim H, Song S;

XX WPI; 2002-393847/42.

XX Novel aquaporin 5 gene mutant useful for diagnosing lung, stomach, colon,

PT prostate, or head or neck cancer.

XX Example 2; Page 148; 154pp; English.

XX The invention comprises a mutant form of the human aquaporin 5 (AQP5)

CC gene. Aquaporin (AQP) is a family of water channel proteins, through

CC which water is transported into and out of cells - ten types of mammalian

CC AQP have been identified so far. The invention also comprises an

CC oligonucleotide (OGN) chip having 902 oligonucleotide primer sequences

CC and a cDNA chip comprising one or more sequences from the human AQP5

CC gene. The mutant AQP5 gene is useful for diagnosing cancer (i.e lung
CC cancer). The OGN chip is useful for detecting mutations and polymorphisms
CC in AQP5 and the cDNA chip is useful for analysis of gene expression. The
CC present DNA sequence represents a human aquaporin (AQP) gene PCR primer
XX
SQ Sequence 21 BP; 3 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 7.6e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1036 TTGGCTGGCCGAGCCA 1054
|||||
DB 3 TTGGCTGGCCATAGGCA 21

RESULT 849
ABQ61241
ID ABQ61241 standard; DNA; 21 BP.
AC
AC ABQ61241;
XX
DT 03-OCT-2002 (first entry)
XX
DE Human aquaporin 5 (AQP5) gene PCR primer 1.
XX
XX Human; ss; PCR; primer; aquaporin; AQP5; AQP; water channel protein;
KW oligonucleotide chip; OGN chip; cDNA chip; lung cancer;
KW mutation detection; polymorphism detection; gene expression.
XX
OS Homo sapiens.
XX
XX WO200220787-A1.
XX
XX
XX
XX 03-OCT-2002 (first entry)
XX
XX Human aquaporin 5 (AQP5) gene PCR primer 1.
XX
XX Human; ss; PCR; primer; aquaporin; AQP5; AQP; water channel protein;
KW oligonucleotide chip; OGN chip; cDNA chip; lung cancer;
KW mutation detection; polymorphism detection; gene expression.
XX
OS Homo sapiens.
XX
XX WO200220787-A1.
XX
XX
XX
XX 14-MAR-2002.
XX
XX 10-SEP-2001; 2001WO-KR001528.
XX
XX 09-SEP-2000; 2000KR-00053821.
XX
XX (GOOD-) GOODGENE INC.
PA (MOON/) MOON W.
PA (MOON/) MOON C.
XX
XX Moon W, Moon C, Moon Y, Kim B, Kim D, Shin C, Um T, Kim H;
PI Song M, Kim H, Song S;
XX
XX WPI; 2002-393847/42.
XX
XX Novel aquaporin 5 gene mutant useful for diagnosing lung, stomach, colon,
PT prostate, or head or neck cancer.
XX
XX Example 1; Page 146; 154pp; English.
XX
XX The invention comprises a mutant form of the human aquaporin 5 (AQP5)
CC gene. Aquaporin (AQP) is a family of water channel proteins, through
CC which water is transported into and out of cells - ten types of mammalian
CC AQP have been identified so far. The invention also comprises an
CC oligonucleotide (OGN) chip having 902 oligonucleotide primer sequences
CC and a cDNA chip comprising one or more sequences from the human AQP5
CC gene. The mutant AQP5 gene is useful for diagnosing cancer (i.e lung
CC cancer). The OGN chip is useful for detecting mutations and polymorphisms
CC in AQP5 and the cDNA chip is useful for analysis of gene expression. The
CC present DNA sequence represents a human aquaporin (AQP) gene PCR primer
XX
SQ Sequence 21 BP; 3 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 7.6e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1036 TTGGCTGGCCGAGCCA 1054
|||||

DB 3 TTGGCTGGCCATAGGCA 21

RESULT 850
ABQ61247
ID ABQ61247 standard; DNA; 21 BP.
XX
AC ABQ61247;
XX
DT 03-OCT-2002 (first entry)
XX
DE Human aquaporin 5 (AQP5) gene PCR primer 5.
XX
XX Human; ss; PCR; primer; aquaporin; AQP5; AQP; water channel protein;
KW oligonucleotide chip; OGN chip; cDNA chip; lung cancer;
KW mutation detection; polymorphism detection; gene expression.
XX
OS Homo sapiens.
XX
XX WO200220787-A1.
XX
XX
XX 14-MAR-2002.
XX
XX 10-SEP-2001; 2001WO-KR001528.
XX
XX 09-SEP-2000; 2000KR-00053821.
XX
XX (GOOD-) GOODGENE INC.
PA (MOON/) MOON W.
PA (MOON/) MOON C.
XX
XX Moon W, Moon C, Moon Y, Kim B, Kim D, Shin C, Um T, Kim H;
PI Song M, Kim H, Song S;
XX
XX WPI; 2002-393847/42.
XX
XX Novel aquaporin 5 gene mutant useful for diagnosing lung, stomach, colon,
PT prostate, or head or neck cancer.
XX
XX Disclosure; Page 148; 154pp; English.
XX
XX The invention comprises a mutant form of the human aquaporin 5 (AQP5)
CC gene. Aquaporin (AQP) is a family of water channel proteins, through
CC which water is transported into and out of cells - ten types of mammalian
CC AQP have been identified so far. The invention also comprises an
CC oligonucleotide (OGN) chip having 902 oligonucleotide primer sequences
CC and a cDNA chip comprising one or more sequences from the human AQP5
CC gene. The mutant AQP5 gene is useful for diagnosing cancer (i.e lung
CC cancer). The OGN chip is useful for detecting mutations and polymorphisms
CC in AQP5 and the cDNA chip is useful for analysis of gene expression. The
CC present DNA sequence represents a human aquaporin (AQP) gene PCR primer
XX
SQ Sequence 21 BP; 3 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 7.6e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1036 TTGGCTGGCCGAGCCA 1054
|||||
DB 3 TTGGCTGGCCATAGGCA 21

RESULT 851
ABL43257
ID ABL43257 standard; DNA; 21 BP.
XX
AC ABL43257;
XX
DT 11-APR-2002 (first entry)
XX
DE Human chromosome 1p36-35 PCR primer SEQ ID NO:301.
XX

KW Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
KW PCR primer; ss.
XX
OS Homo sapiens.
XX
FN JP2001321190-A.
XX
PD 20-NOV-2001.
XX
XX 12-MAR-2001; 2001JP-00068285.
XX
PR 10-MAR-2000; 2000JP-00066716.
XX
XX (RIKA) RIKAGAKU KENKYUSHO.
PA (GENO-) GENOTEX YG.
XX
XX WPI; 2002-144136/19.
DR
XX
XX Arraying genome clones.
XX
XX Claim 4; Page 10; 528pp; Japanese.
XX
CC The present invention describes a method of arraying genome clones. The
CC method comprises: (a) clones of the genomic libraries contained in
CC multiwell plates numbered for discrimination are mixed in each of the
CC multiwell plates; (b) a primer designed based on the chromosome marker
CC sequence is added to the mixture to carry out an amplification reaction;
CC (c) a signal corresponding to the marker is detected from the resultant
CC amplified product to specify the discrimination Nos. of the multiwell
CC plates containing the clones having said marker sequence; (d) the order
CC of the markers is changed so that the same discrimination Nos. succeed to
CC the maximum in the specified discrimination Nos. to array the multiwell
CC plates; (e) the clones in the multiwell plates of the specified
CC discrimination Nos. are mixed respectively in each wells of longitudinal
CC and lateral directions; (f) the mixed clones are cultured and the
CC resultant cultures are amplified by using the above primer; (g) signals
CC are detected from the amplified products; (h) the clones in the multiwell
CC plates are specified from the detected result; and (i) the clones are
CC reconstituted as the positions on the chromosome and arrayed. The
CC microarray is useful for gene analysis. ABU42957 to ABU45322 represent
CC PCR primers for human chromosome 1p36-35 DNA, and ABU45323 to ABU45634
CC represent PCR primers for human chromosome 21q22.1, which are
CC specifically claimed for use in the present invention
XX
SQ Sequence 21 BP; 7 A; 5 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 7.6e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 597 CTTTGGGAACCTGGAGACC 615
DB 3 CATTGAGAACTGGAGACC 21

RESULT 852
ABN88844
ID ABN88844 standard; RNA; 21 BP.
XX
AC ABN88844;
XX
XX 21-AUG-2002 (first entry)
XX
DE Rat metallothionein MT-II target sequence SEQ ID NO:47.
XX
XX Apoptosis-inducing ribozyme; hammerhead ribozyme; ribozyme; MT;
KW metallothionein; cancer; tumour; ss.
XX
OS Rattus sp.
XX
XX WO200236740-A2.
FN
XX
PD 10-MAY-2002.

XX 31-OCT-2001; 2001WO-US046062.
PF
XX
PR 31-OCT-2000; 2000US-0244709P.
XX
XX (UYMA-) UNIV MASSACHUSETTS MEDICAL CENT.
XX
XX Lee K, Lau K, Ho S;
PI
XX
XX WPI; 2002-479757/51.
DR
XX
XX New ribozymes directed against metallothionein mRNAs, useful for inducing
PT apoptosis in human cancer cells, for inhibiting tumor growth and for
PT enhancing the effectiveness of chemotherapy or radiation therapy against
PT cancer cells.
XX
XX Example 2; Fig 2B; 63pp; English.
PS
XX
CC The present invention describes a ribozyme comprising Hu MT-Ta Rz, Hu MT-
CC Ie/r Rz, Hu MT-If Rz, Hu MT-Ib Rz, Hu MT-Ighlx/-II Rz, Rz1-2, or Rz4-9
CC (see ABN88812 to ABN88818). The ribozymes have cytostatic activity. The
CC ribozymes are targeted to metallothionein (MT) and so are metallothionein
CC inhibitors and apoptosis inducers. The ribozymes are useful for inducing
CC apoptosis in human cancer cells, for inhibiting tumour growth, and for
CC enhancing the effectiveness of chemotherapy or radiation therapy against
CC cancer cells. The ribozyme-based methods for treating cancer, from the
CC present invention, offer the following advantages over conventional
CC antisense-based methods of limiting metallothionein production in target
CC cells: (1) ribozymes destroy metallothionein-encoding mRNAs rather than
CC merely hybridising them; (2) ribozymes act like enzymes and each molecule
CC can be recycled to degrade multiple mRNA molecules; (3) a ribozyme need
CC not have perfect complementarity with a target mRNA to destroy the RNA;
CC and (4) a single ribozyme can be designed to destroy several related
CC mRNAs that encode different metallothioneins more readily than a
CC conventional antisense molecule can be designed to be effective against
CC various mRNAs. ABN88819 to ABN88870 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 21 BP; 6 A; 4 C; 8 G; 0 T; 3 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 68.4%; Pred. No. 7.6e+02;
Matches 13; Conservative 3; Mismatches 3; Indels 0; Gaps 0;

QY 1167 GGGCTGCATCTCTATGAG 1185
DB 2 GGGCUGCAUCUGCAAGAG 20

RESULT 853
ABS97586/C
ID ABS97586 standard; DNA; 21 BP.
XX
XX ABS97586;
AC
XX
XX 23-DEC-2002 (first entry)
DT
XX
XX Human epoxide hydrolase 2 polymorphic sequence #77.
DE
XX
XX Human; ds; cytochrome P450 A1; CYP450A1; UGT2B4; MDR1;
KW cytochrome P450 A2; CYP450A2; cytochrome P450 02E; CYP45002E1; LTF;
KW adrenergic receptor beta1; ADRB1; aryl hydrocarbon; AHR; MRP3; NR112;
KW aryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS;
KW cyclooxygenase 2; COX2; diazepam binding inhibitor; DBI; haematological;
KW epoxide hydrolase 2; EPHX2; 5-lipoxygenase activating protein; FLAP;
KW glutathione-S-transferase 12; GST12; histamine-N-methyl transferase;
KW HNMT; kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NNMT;
KW NADPH quinone oxidoreductase 2; NQO2; sulfoltransferase thermolabile; STM;
KW UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7;
KW UGT2B7; UDP-glucuronosyl transferase; UGT2B15; urokinase receptor; UPA;
KW multidrug resistance 1; lactotransferrin; orphan nuclear receptor;
KW multidrug resistance associated protein 3; cancer; prostate;
KW acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5;

KW altered drug metabolism; cardiovascular function; colorectal tumour;
KW central nervous system; pulmonary; immunological; SNP;
XX single nucleotide polymorphism.
OS Homo sapiens.
XX WO200257410-A2.
XX 25-JUL-2002.
XX 28-NOV-2001; 2001WO-US044838.
XX 28-NOV-2000; 2000US-00724389.
XX (DNAS-) DNA SCI LAB INC.
XX Guida M, Hall J;
XX WPI; 2002-698522/75.
XX Isolated nucleic acid molecules having polymorphisms in known human genes
PT e.g. cytochrome p450 and cathepsin S useful as genetic linkage markers
PT for locating, identifying and characterizing the genes responsible for
PT disorder-related traits.
XX Example 10; Page 119; 714pp; English.
XX This invention relates to the sequence of an isolated nucleic acid
CC molecule comprising at least one base variation from that of a known
CC human cytochrome P450 A1 (CYP450A1), cytochrome P450 A2 (CYP450A2),
CC cytochrome P450 02E1 (CYP45002E1), adrenic receptor betai (ADBR1),
CC aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator
CC (ARNT), cathepsin S (CTSS), cyclooxygenase 2 (COX2), diazepam binding
CC inhibitor (DBI), epoxide hydroxylase 2 (EPHX2), 5-lipoxygenase activating
CC protein (FLAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl
CC transferase (HNMT), kallikrein 2) KUK2, nicotinamide -N-methyl
CC sulfoltransferase (NNMT), NADPH quinone oxidoreductase 2 (NQO2),
CC sulfoltransferase thermolabile (STM), UDP-glucuronosyl transferase 2B4
CC (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl
CC transferase (UGT2B15), urokinase receptor (UPA), multidrug resistance 1
CC (MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3
CC (MRP3), orphan nuclear receptor (NR112), or acetylcholine muscarinic
CC receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence.
CC The polymorphisms in the human genes cited in the invention are useful as
CC genetic linkage markers for locating and characterizing the genes that
CC are responsible for specific traits within the genome and eventually
CC identifying the genes responsible for a variety of disorder-related
CC traits as a result of their e.g., overexpression, constitutive
CC expression, mutation or underexpression, which may be used in diagnosing
CC and/or treating the disorders. The nucleic acid molecules comprising the
CC polymorphic sequences contained in CYP450A1, CYP450A2, CYP4502E1,
CC ARNT, EPHX2, GST12, NNMT, NQO2, NR112, STM, UGT2B4, UGT2B7, UGT2B15, AHR,
CC MDR1 and/or MDR3 are useful for screening individuals for altered drug
CC metabolism. The polymorphic sequences contained in CYP450A1, CYP450A2,
CC AHR, MDR1 and/or MDR3 may also be used to screen individuals for
CC susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are
CC used to screen for altered cardiovascular function, in COX2 for altered
CC susceptibility to colorectal tumours, in DBI or CHMR1 for altered central
CC nervous system function, in FLAP and HNMT for altered pulmonary,
CC immunological or haematological function, in KUK2 for altered serine
CC protease activity in the prostate, in LTF for altered immunological or
CC haematological function, in CHMR3, CHMR4 or CHMR5 for altered central and
CC peripheral nervous system function. The present sequence represents a
CC polymorphic DNA sequence of the invention
XX
XX Sequence 21 BP; 3 A; 9 C; 4 G; 5 T; 0 U; 0 Other;
SQ

Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 7.6e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1644 GCTGGAGGATGGCACACC 1662

Db 21 GCTGGAGGATGGCACACC 3
RESULT 854
ABS97587/c
ID ABS97587 standard; DNA; 21 BP.
XX
XX ABS97587;
AC
XX 23-DEC-2002 (first entry)
DT
XX Human epoxide hydroxylase 2 polymorphic sequence #78.
DE
XX Human; ds; cytochrome P450 A1; CYP450A1A1; UGT2B4; MDR1;
KW cytochrome P450 A2; CYP450A2; cytochrome P450 02E; CYP45002E1; LTF;
KW adrenic receptor betai; ADRB1; aryl hydrocarbon; AHR; MRP3; NR112;
KW aryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS;
KW cyclooxygenase 2; COX2; diazepam binding inhibitor; DBI; haematological;
KW epoxide hydroxylase 2; EPHX2; 5-lipoxygenase activating protein; FLAP;
KW glutathione-S-transferase 12; GST12; histamine-N-methyl transferase;
KW HNMT; kallikrein 2; KUK2; nicotinamide-N-methyl transferase; NNMT;
KW NADPH quinone oxidoreductase 2; NQO2; sulfoltransferase thermolabile; STM;
KW UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7;
KW UGT2B7; UDP-glucuronosyl transferase; UGT2B15; urokinase receptor; UPA;
KW multidrug resistance 1; lactotransferrin; orphan nuclear receptor;
KW multidrug resistance associated protein 3; cancer; prostate;
KW acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5;
KW central nervous system; pulmonary; immunological; SNP;
KW single nucleotide polymorphism.
XX Homo sapiens.
OS
XX WO200257410-A2.
XX 25-JUL-2002.
XX 28-NOV-2001; 2001WO-US044838.
XX 28-NOV-2000; 2000US-00724389.
XX (DNAS-) DNA SCI LAB INC.
XX Guida M, Hall J;
XX WPI; 2002-698522/75.
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PT for locating, identifying and characterizing the genes responsible for
PT disorder-related traits.
XX Example 10; Page 119; 714pp; English.
XX This invention relates to the sequence of an isolated nucleic acid
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CC cytochrome P450 02E1 (CYP45002E1), adrenic receptor betai (ADBR1),
CC aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator
CC (ARNT), cathepsin S (CTSS), cyclooxygenase 2 (COX2), diazepam binding
CC inhibitor (DBI), epoxide hydroxylase 2 (EPHX2), 5-lipoxygenase activating
CC protein (FLAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl
CC transferase (HNMT), NADPH quinone oxidoreductase 2 (NQO2),
CC sulfoltransferase thermolabile (STM), UDP-glucuronosyl transferase 2B4
CC (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl
CC transferase (UGT2B15), urokinase receptor (UPA), multidrug resistance 1
CC (MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3
CC (MRP3), orphan nuclear receptor (NR112), or acetylcholine muscarinic
CC receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence.
CC The polymorphisms in the human genes cited in the invention are useful as
CC genetic linkage markers for locating and characterizing the genes that
CC are responsible for specific traits within the genome and eventually
CC identifying the genes responsible for a variety of disorder-related
CC traits as a result of their e.g., overexpression, constitutive
CC expression, mutation or underexpression, which may be used in diagnosing
CC and/or treating the disorders. The nucleic acid molecules comprising the
CC polymorphic sequences contained in CYP450A1, CYP450A2, CYP4502E1,
CC ARNT, EPHX2, GST12, NNMT, NQO2, NR112, STM, UGT2B4, UGT2B7, UGT2B15, AHR,
CC MDR1 and/or MDR3 are useful for screening individuals for altered drug
CC metabolism. The polymorphic sequences contained in CYP450A1, CYP450A2,
CC AHR, MDR1 and/or MDR3 may also be used to screen individuals for
CC susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are
CC used to screen for altered cardiovascular function, in COX2 for altered
CC susceptibility to colorectal tumours, in DBI or CHMR1 for altered central
CC nervous system function, in FLAP and HNMT for altered pulmonary,
CC immunological or haematological function, in KUK2 for altered serine
CC protease activity in the prostate, in LTF for altered immunological or
CC haematological function, in CHMR3, CHMR4 or CHMR5 for altered central and
CC peripheral nervous system function. The present sequence represents a
CC polymorphic DNA sequence of the invention
XX
XX Sequence 21 BP; 3 A; 9 C; 4 G; 5 T; 0 U; 0 Other;
SQ

CC identifying the genes responsible for a variety of disorder-related
 CC traits as a result of their e.g., overexpression, constitutive
 CC expression, mutation or underexpression, which may be used in diagnosing
 CC and/or treating the disorders. The nucleic acid molecules comprising the
 CC polymorphic sequences contained in CYP450A1, CYP450A2, CYP450A3, AHR,
 CC ARNT, EPHX2, GSTT2, NNMT, NQO2, NR1I2, STW, UGT2B4, UGT2B7, UGT2B15, AHR,
 CC MDR1 and/or MDR3 are useful for screening individuals for altered drug
 CC metabolism. The polymorphic sequences contained in CYP450A1, CYP450A2,
 CC AHR, MDR1 and/or MDR3 may also be used to screen individuals for
 CC susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are
 CC used to screen for altered cardiovascular function, in COX2 for altered
 CC susceptibility to colorectal tumours, in DBI or CHMR1 for altered central
 CC nervous system function, in FLAP and HMMT for altered pulmonary,
 CC immunological or haematological function, in KIK2 for altered serine
 CC protease activity in the prostate, in LTF for altered immunological or
 CC haematological function, in CHMR3, CHMR4 or CHMR5 for altered central and
 CC peripheral nervous system function. The present sequence represents a
 CC polymorphic DNA sequence of the invention
 XX Sequence 21 BP; 3 A; 9 C; 4 G; 5 T; 0 U; 0 Other;
 SQ

Query Match 0.8%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1644 GCTGGAGGGATGCCACACC 1662
 DB 21 GGTGGAGGATGGCACACC 3

RESULT 855
 ABK16378
 ID ABK16378 standard; DNA; 21 BP.
 AC ABK16378;
 XX
 DT 14-MAR-2002 (first entry)
 XX Human adipose protein, adp, PCR primer #8.
 DE
 XX Adipose protein; ss; adp; obesity; transgenic animal; obesity;
 KW adipositas; bulimia; wasting; cachexia; eating disorder;
 KW body weight disorder; weight loss; cancer; infectious disease;
 KW hypogonadism; Prader-Willi syndrome; Laurence-Moon-Biedl syndrome;
 KW hypothyroidism; diabetes; Cushing's syndrome; endocrine disorder;
 KW gastrointestinal diseases; inflammatory bowel disease; PCR primer;
 KW ulcerative colitis; anorexia nervosa; glycogen storage disease;
 KW lipid storage disease; lipoma; liposarcoma; heart disease; hypertension;
 KW infertility; acquired immunodeficiency syndrome; AIDS.
 XX
 OS Homo sapiens.
 XX
 XX WO200196371-A2.
 XX
 XX 20-DEC-2001.
 XX
 XX 13-JUN-2001; 2001WO-EP006713.
 XX
 XX 16-JUN-2000; 2000US-0211914P.
 XX 23-JUN-2000; 2000EP-00113049.
 XX 28-JUN-2000; 2000US-0214518P.
 XX 17-APR-2001; 2001EP-00109537.
 XX
 XX (DEVE-) DEVELOGEN AG.
 XX
 XX Broenner G, Ciossek T, Dohrmann C, Haeder T, Rothe M;
 XX WPI; 2002-106464/14.
 XX
 XX Novel nucleic acid encoding adipose polypeptide which regulates, causes
 XX or contributes to obesity, useful for treating obesity, heart disease,
 XX hypertension, infertility, and controlling weight loss in cancer
 XX patients.

XX Claim 1; Page 171; 188pp; English.
 PS The invention relates to a nucleic acid encoding a adipose (ADP)
 CC polypeptide which regulates, causes or contributes to obesity in an
 CC animal or a human. The polynucleotides, proteins, ant-adv antibodies,
 CC modulators of adp activity, adp antisense nucleic acids, expression
 CC vectors, adp transgenic animals are useful in the diagnosis and treatment
 CC of obesity, adipositas, bulimia, wasting (cachexia), eating disorders
 CC and/or disorders of body weight/body mass, weight loss due to cancer or
 CC infectious diseases, genetic disorders associated with hypogonadism e.g.
 CC Prader-Willi syndrome, Laurence-Moon-Biedl syndrome, hypothyroidism,
 CC diabetes, Cushing's syndrome, endocrine disorders, gastrointestinal
 CC diseases, inflammatory bowel disease, ulcerative colitis, and anorexia
 CC nervosa. They are also useful for treating disorders of body weight/mass
 CC e.g. glycogen storage diseases, and lipid storage diseases and for
 CC treating lipomas, and/or liposarcomas. The compositions are also useful
 CC for treating heart disease, hypertension, and infertility and for
 CC treating conditions associated with under weight e.g. enhancing or
 CC controlling fertility, controlling weight loss in acquired
 CC immunodeficiency syndrome (AIDS) or cancer patients. The present sequence
 CC is a PCR primer used to amplify an adp nucleic acid
 XX Sequence 21 BP; 4 A; 8 C; 5 G; 4 T; 0 U; 0 Other;
 SQ

Query Match 0.8%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1029 GCGTGACCTTGGCCTGGCC 1047
 DB 3 GGCACACTTTCGCTGGCC 21

RESULT 856
 ABK16377/C
 ID ABK16377 standard; DNA; 21 BP.
 AC ABK16377;
 XX
 DT 14-MAR-2002 (first entry)
 XX Human adipose protein, adp, PCR primer #7.
 DE
 XX Adipose protein; ss; adp; obesity; transgenic animal; obesity;
 KW adipositas; bulimia; wasting; cachexia; eating disorder;
 KW body weight disorder; weight loss; cancer; infectious disease;
 KW hypogonadism; Prader-Willi syndrome; Laurence-Moon-Biedl syndrome;
 KW hypothyroidism; diabetes; Cushing's syndrome; endocrine disorder;
 KW gastrointestinal diseases; inflammatory bowel disease; PCR primer;
 KW ulcerative colitis; anorexia nervosa; glycogen storage disease;
 KW lipid storage disease; lipoma; liposarcoma; heart disease; hypertension;
 KW infertility; acquired immunodeficiency syndrome; AIDS.
 XX
 OS Homo sapiens.
 XX
 XX WO200196371-A2.
 XX
 XX 20-DEC-2001.
 XX
 XX 13-JUN-2001; 2001WO-EP006713.
 XX
 XX 16-JUN-2000; 2000US-0211914P.
 XX 23-JUN-2000; 2000EP-00113049.
 XX 28-JUN-2000; 2000US-0214518P.
 XX 17-APR-2001; 2001EP-00109537.
 XX
 XX (DEVE-) DEVELOGEN AG.
 XX
 XX Broenner G, Ciossek T, Dohrmann C, Haeder T, Rothe M;
 XX WPI; 2002-106464/14.
 XX

PT Novel nucleic acid encoding adipose polypeptide which regulates, causes
PT or contributes to obesity, useful for treating obesity, heart disease,
PT hypertension, infertility, and controlling weight loss in cancer
PT patients.

PS Claim 1; Page 171; 189pp; English.
XX
CC The invention relates to a nucleic acid encoding a adipose (ADP)
CC polypeptide which regulates, causes or contributes to obesity in an
CC animal or a human. The polynucleotides, proteins, ant-adp antibodies,
CC modulators of adp activity, adp antisense nucleic acids, expression
CC vectors, adp transgenic animals are useful in the diagnosis and treatment
CC of obesity, adipositas, bulimia, wasting (cachexia), eating disorders
CC and/or disorders of body weight/body mass, weight loss due to cancer or
CC infectious diseases, genetic disorders associated with hypogonadism e.g.
CC Prader-Willi syndrome, Laurence-Moon-Biedl syndrome, hypothyroidism,
CC diabetes, Cushing's syndrome, endocrine disorders, gastrointestinal
CC diseases, inflammatory bowel disease, ulcerative colitis, and anorexia
CC nervosa. They are also useful for treating disorders of body weight/mass
CC e.g. glycogen storage diseases, and lipid storage diseases and for
CC treating lipomas, and/or liposarcomas. The compositions are also useful
CC for treating heart disease, hypertension, and infertility and for
CC treating conditions associated with under weight e.g. enhancing or
CC controlling fertility, controlling weight loss in acquired
CC immunodeficiency syndrome (AIDS) or cancer patients. The present sequence
CC is a PCR primer used to amplify an adp nucleic acid
XX
SQ Sequence 21 BP; 4 A; 5 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 7.6e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1029 GGCTGACTTTGGCTGGCC 1047
DB 19 GGCACACTTTCGCTGGCC 1

RESULT 857
ABL61474
ID ABL61474 standard; DNA; 21 BP.
AC ABL61474;
XX
DT 17-SEP-2002 (first entry)
XX
DE Human UGT1A7 codon 11 polymorphism associated primer A.
XX
KW UGT1A7; uridine diphosphate-5'-glucuronosyl transferase; UGP; primer;
KW carcinoma; inflammatory bowel disease; genetic predisposition; colon;
KW polymorphism; UGT1A7*2; UGT1A7*3; UGT1A7*4; antitumour; cytostatic;
KW antinflammatory; gene therapy; diagnosis; pancreas; liver; stomach;
KW oesophagus; ss.
XX
OS Homo sapiens.
XX
PN WO200253770-A2.
XX
PD 11-JUL-2002.
XX
PP 03-JAN-2002; 2002WO-DE000003.
XX
PR 05-JAN-2001; 2001DE-01000238.
XX
XX (MEDI-) MEDIZINISCHE HOCHSCHULE HANNOVER.
XX
XX Manns M, Strassburg C;
XX
XX WPI; 2002-509023/54.
XX
XX Diagnosing, and predicting risk, of carcinoma and inflammatory bowel
PT disease, comprises detecting polymorphisms in the gene for uridine
PT diphosphate-5'-glucuronosyl transferase.

XX
PS Example 1; Page 12; 26pp; German.
XX
CC This invention describes a novel method of predicting the risk, and/or
CC for diagnosis of carcinoma and inflammatory bowel disease (IBD)
CC associated with a genetic predisposition. The method comprises testing a
CC subject's DNA for the presence of a polymorphic UGT1A7 allele (UGT =
CC uridine diphosphate-5'-glucuronosyl transferase) that contains mutations
CC in codons 11, 129, 131 and/or 208. Polymorphic UGT1A7*2, UGT1A7*3 or
CC UGT1A7*4 genes are used for preparing the corresponding UGT isoforms for
CC metabolic characterization of antitumour therapeutics and for examining
CC toxicity/carcinogenicity of potential UGT1A7 substrates. The products of
CC the invention have cytostatic and antinflammatory activity and are
CC appropriate for gene therapy. The method of the invention is used for
CC diagnosis, or assessing risk, of carcinoma, especially of the colon, early
CC pancreas, liver, stomach or oesophagus, and IBD. The method allows a primer
CC identification of subjects at risk. This sequence represents a primer
CC used in the identification of the UGT1A7 polymorphism at codon 11 of the
CC wild-type UGT1A7 gene
XX
SQ Sequence 21 BP; 2 A; 7 C; 7 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 7.6e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 938 GTGGCTGGCTGGCTGGCC 956
DB 3 GTGGACTGGCCCTCTCCA 21

RESULT 858
ABX99015/c
ID ABX99015 standard; DNA; 21 BP.
XX
AC ABX99015;
XX
DT 20-MAY-2003 (first entry)
XX
DE Human AAGA SNP analysis PCR primer, #42.
XX
KW Human; PCR; primer; ss; asthma; bronchial hyperresponsiveness;
KW airway obstruction; chronic bronchial inflammation;
KW multifactorial disease; asthma-associated gene; AAGA; allele-specific;
KW single nucleotide polymorphism; SNP; genetic profile; gene therapy;
KW antisense gene therapy; adult distress respiratory syndrome;
KW chronic obstructive pulmonary; chronic bronchitis; dyspnea.
XX
OS Homo sapiens.
XX
PN WO2003008640-A2.
XX
PD 30-JAN-2003.
XX
PF 15-JUL-2002; 2002WO-EP007847.
XX
PR 16-JUL-2001; 2001US-0305649P.
XX
PA (NOVS) NOVARTIS AG.
PA (NOVS) NOVARTIS-ERFINDUNGEN VERW GES MBH.
PA (UYWA-) UNIV WAKE FOREST HEALTH SCI.
PA (UYGR-) RIJKSUNIV GRONINGEN.
XX
PI Whittaker PA, Meyers DA, Postma DS, Bleecker ER;
XX
XX WPI; 2003-239359/23.
XX
XX Determining whether a subject has or is at risk of developing a disease
PT characterized by bronchial hyperresponsiveness, comprises determining the
PT expression or bioactivity level of an asthma-associated gene.
XX
XX Example 3; Page 27; 70pp; English.
XX

CC The invention discloses a method for determining a disease (e.g. asthma)
 CC characterised by bronchial hyperresponsiveness, or the risk of developing
 CC it and airway obstruction or chronic bronchial inflammation. Asthma is a
 CC multifactorial disease, so discovery of the asthma susceptibility genes
 CC can identify the fundamental mechanisms behind asthma. One such gene is
 CC the asthma-associated gene, AAGA. Also disclosed is an allele-specific
 CC primer or oligonucleotide probe capable of detecting a polymorphism, an
 CC isolated polynucleotide, and encoded polypeptide, which is a variant of
 CC AAGA associated with bronchial hyperresponsiveness and methods for
 CC pharmacogenomically selecting a therapy to be administered to an
 CC individual having asthma, comprising determining an AAGA genetic profile
 CC and comparing the individual's genetic profile to an AAGA genetic
 CC population profile, monitoring the effectiveness of treatment (e.g. gene
 CC therapy or antisense gene therapy) of a subject and identifying a
 CC substance which binds to or modulates the activity of AAGA. The
 CC polynucleotide, polypeptide encoded by it, antibody to the polypeptide,
 CC or an oligonucleotide, is useful for preparing a medicament for treating
 CC a disease characterised by bronchial hyperresponsiveness, or inflammatory
 CC or obstructive airways diseases, e.g. adult distress respiratory
 CC syndrome, chronic obstructive pulmonary, chronic bronchitis or dyspnea.
 CC The method is useful for prognosing, diagnosing or confirming that a
 CC symptomatic subject has a genetic defect which causes or contributes to
 CC the particular disease or disorder, for ascertaining an individual's
 CC predilection to develop bronchial responsiveness and for customising a
 CC therapy for the individual according to the individual's genetic profile.
 CC The sequences presented in ABX98968-ABX99053 and ABX99084-ABX99066 are
 CC PCR primers which were used to amplify sequences used in human AAGA
 CC vector construction and primers used to analyse AAGA single nucleotide
 CC polymorphisms (SNPs)
 CC
 CC Sequence 21 BP; 3 A; 5 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1380 GGCGGACCTCCCTCACCAG 1398
 DB 21 GGCTGACCGCTTCACGAG 3

RESULT 859
 ACD02587/c

ID ACD02587 standard; DNA; 21 BP.

AC ACD02587;

XX 31-JUL-2003 (first entry)

DE Mouse zsig37 orthologue sequencing primer ZC18687.

XX Blood flow; vasodilation; wound repair; platelet inhibition; tumour;
 KW vascular occlusion; ischaemic reperfusion injury; microvascular repair;
 KW adipocyte complement related protein; intestinal strangulation; trauma;
 KW angioplasty; coronary artery bypass graft; endarterectomy; aneurysm;
 KW anastomosis; stroke; cardiopulmonary bypass ischaemia; inflammation;
 KW myocardial infarction; percutaneous transluminal angioplasty; infection;
 KW post-trauma vasospasm; prostatic biomaterial; fibroblast recruitment;
 KW wound retraction; mouse; zsig37; primer; ss; sequencing; PCR.

OS Mus musculus.

XX US2003022838-A1.

PD 30-JAN-2003.

XX 25-JUN-2002; 2002US-00180762.

XX 19-FEB-1999; 99US-00233604.

PR 22-NOV-1999; 99US-00444794.

PR 17-FEB-2000; 2000US-00506855.

PR 19-JUL-2000; 2000US-00619740.

XX

PA (SHEP/) SHEPPARD P O.
 PA (LASS/) LASSER G W.
 PA (BISH/) BISHOP P D.

XX Sheppard PO, Lasser GW, Bishop PD;

XX WPI; 2003-456304/43.

XX Promoting blood flow or inducing vasodilation within vasculature of
 PT mammal, or pacifying damaged collagenous tissues or pacifying surface of
 PT prostatic biomaterial, by administering adipocyte complement related
 PT protein.

PS Example 9; Page 29; 46pp; English.

XX The invention relates to a method of promoting blood flow or inducing
 CC vasodilation within the vasculature of a mammal, pacifying damaged
 CC collagenous tissues or surface of prostatic biomaterial, mediating wound
 CC repair, inhibiting platelet adhesion, activation or accretion, minimising
 CC vascular occlusion, protecting ischaemic myocardium from reperfusion
 CC injury or mediating tumour metastasis, comprising administering adipocyte
 CC complement related protein. The method is useful for promoting blood flow
 CC within the vasculature of a mammal, where the mammal suffers from acute
 CC vascular injury, where the injury is due to vascular reconstruction which
 CC comprises angioplasty, coronary artery bypass graft, endarterectomy,
 CC microvascular repair or anastomosis of a vascular graft, or the injury is
 CC due to trauma, stroke or aneurysm. The method is useful for pacifying
 CC damaged collagenous tissues within a mammal, where the damaged
 CC collagenous tissues are due to injury associated with ischaemia and
 CC reperfusion. The injury comprises trauma injury, ischaemia, intestinal
 CC strangulation, or injury associated with pre- and post-establishment of
 CC blood flow. The mammal suffers from cardiopulmonary bypass ischaemia and
 CC resection, myocardial infarction, or post-trauma vasospasm. The post-
 CC trauma vasospasm comprises stroke, percutaneous transluminal angioplasty,
 CC endarterectomy, accidental vascular trauma or surgical-induced vascular
 CC trauma. The method is useful for pacifying the surface of a prostatic
 CC biomaterial for use in association with a mammal, where the surface of
 CC the prostatic biomaterial is coated with collagen or collagen fragments,
 CC gelatin, fibrin or fibronectin. The method is useful for mediating wound
 CC repair within a mammal, where the method enhances progression in wound
 CC healing and progression in wound healing comprises reduction in
 CC inflammation, reduction in fibroblast recruitment, wound retraction, or
 CC reduction in infection. The method is useful for inhibiting platelet
 CC adhesion, activation or accretion. The method is useful for minimising
 CC vascular occlusion by increasing patency time in a patient in need of the
 CC treatment. The method is useful for inducing vasodilation within the
 CC vasculature of a mammal. The method is useful for protecting ischaemic
 CC myocardium from reperfusion injury. The method is useful for mediating
 CC tumour metastasis. The present sequence represents the mouse adipocyte
 CC complement related protein zsig27 DNA orthologue sequencing primer

XX Sequence 21 BP; 5 A; 4 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;

Best Local Similarity 84.2%; Pred. No. 7.6e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 822 GAAGTCCTCCACCTGTC 840

DB 21 GAAGTCCTCCACCTGTC 3

RESULT 860

ABX04548/c

ID ABX04548 standard; DNA; 21 BP.

XX AC ABX04548;

XX 13-JAN-2003 (first entry)

XX Mouse adipose complement related protein zsig37 primer ZC18687.

XX Mouse; ss; primer; adipocyte complement related protein; zsig37;

chromosome 17q25.2; blood flow; vulnery; antibacterial; vasotropic;
 anticoagulant; immunosuppressive; damaged collagenous tissue;
 complement activation; thrombosis; trauma; ischaemia; reperfusion;
 intestinal strangulation; cardiopulmonary bypass ischaemia;
 myocardial infarction; post-trauma vasospasm; stroke;
 percutaneous transluminal angioplasty; endarterectomy;
 accidental vascular trauma; surgical-induced vascular trauma;
 haemostasis; wound healing; antimicrobial.
 Mus musculus.
 US6448221-B1.
 10-SEP-2002.
 17-FEB-2000; 2000US-00506855.
 19-FEB-1999; 99US-00253604.
 22-NOV-1999; 99US-00444794.
 (ZYMO) ZYMOGENETICS INC.
 Sheppard PO, Lasser GW, Bishop PD;
 WPI; 2003-038245/03.
 Promoting blood flow within the vasculature of a mammal, comprises
 administering a pharmaceutical formulation comprising zsig37 proteins.
 Example 9; Col 53; 39pp; English.
 The invention relates to promoting blood flow within the vasculature of a
 mammal, comprises administering to the mammal an amount of a
 pharmaceutical formulation that comprises an adipocyte complement related
 protein, zsig37, having residues 28-281 of a sequence appearing as
 ABG9070. Also included is a method of pacifying damaged collagenous
 tissues within a mammal, comprising administering to the mammal an amount
 of the pharmaceutical formulation cited above, which achieves
 pacification of the damaged collagenous tissues by inhibiting complement
 activation or by reducing thrombosis formation. The method is useful in
 promoting blood flow within the vasculature of a mammal by reducing
 thrombogenic and complement activity, and in pacifying damaged
 collagenous surfaces (e.g. in trauma, ischaemia, reperfusion, intestinal
 strangulation, cardiopulmonary bypass ischaemia, myocardial infarction,
 post-trauma vasospasm, stroke, percutaneous transluminal angioplasty,
 endarterectomy, accidental vascular trauma or surgical-induced vascular
 trauma). The zsig37 polypeptide, polynucleotide, and an anti-zsig37
 antibody are useful as inhibitors of haemostasis and immune function, in
 modulating wound healing, and for antimicrobial applications. The human
 gene for zsig37 is located on chromosome 17q25.2. The present sequence is
 a primer used to sequence cDNA encoding mouse zsig37
 Sequence 21 BP; 5 A; 4 C; 8 G; 4 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 822 GAAGTCCTCACCCTGTC 840
 DB 21 GAAGTCCTCCTCAGCTGTC 3
 RESULT 861
 ACD26013/C
 ID ACD26013 standard; DNA; 21 BP.
 XX
 AC ACD26013;
 XX
 DT 01-SEP-2003 (first entry)
 XX
 DE Human Folate receptor alpha antisense oligonucleotide #8.

Human; ss; antisense; folate receptor alpha; cytostatic; gene therapy;
 ribozyme; ovarian cancer; cervical cancer; uterine cancer; brain cancer.
 Homo sapiens.
 US2003050267-A1.
 13-MAR-2003.
 11-MAR-2002; 2002US-00093523.
 09-MAR-2001; 2001US-0274249P.
 (JHAV/) JHAVERI M S.
 (ELWO/) ELWOOD P C.
 (CHUN/) CHUNG K.
 Jhaveri MS, Elwood PC, Chung K;
 WPI; 2003-503577/47.
 New antisense oligonucleotide, useful for preparing a composition for
 treating cancer.
 Example 10; Page 10; 23pp; English.
 The invention relates to an antisense oligonucleotide complementary to a
 region of the open reading frame of human folate receptor alpha
 comprising a 774-bp sequence. Also included are inhibiting growth of
 cancer cells susceptible to growth inhibition, a ribozyme containing the
 antisense oligonucleotide and a vector comprising the antisense
 oligonucleotide. The antisense oligonucleotide is useful for preparing a
 composition for treating cancer of the ovary, cervix, uterus and brain.
 The present sequence is an antisense oligonucleotide targeting the human
 folate receptor alpha cDNA
 Sequence 21 BP; 2 A; 8 C; 5 G; 6 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1076 ACTCCCAATGAGGTGGTGC 1094
 DB 20 ACCCCAATGAGGTGGTGC 2
 RESULT 862
 ACD25911
 ID ACD25911 standard; DNA; 21 BP.
 XX
 AC ACD25911;
 XX
 DT 29-AUG-2003 (first entry)
 XX
 DE Mouse tryptase-like polypeptide Ztryp-1 related PCR primer #2.
 XX
 KW Mouse; tryptase-like protein; atryp-1; cardiovascular; cardiac;
 KW antiinflammatory; antiarthritic; antifertility; contraceptive;
 KW protein therapy; contractile tissue dysfunction; cardiovascular disease;
 KW inflammatory actions in heart; inflammatory bowel disease; arthritis;
 KW infertility; impotence; male reproductive dysfunction; birth control;
 KW in vitro fertilisation; birth; PCR; primer; ss.
 Mus musculus.
 US6514741-B1.
 04-FEB-2003.
 09-AUG-2000; 2000US-00636382.
 18-AUG-1999; 99US-0149563P.

XX PA (ZYMO) ZYMOGENETICS INC.
XX PI Presnell SR, Taft DW;
XX XX WPI; 2003-491701/46.
XX DR New tryptase-like polypeptides (ZTRYP1), useful for treating a
XX PT dysfunction associated with contractile tissues (e.g. heart), for
XX PT modulating contractility, or for treating e.g. cardiovascular disease,
XX PT arthritis or infertility.
XX PS Example 1; Col 63-64; 40pp; English.
XX XX The invention describes a new polypeptide (ZTRYP1) having a sequence
XX CC comprising amino acid residues 44 (Val) - 276 (Ile), 24 (Leu) - 276
XX CC (Ile), 44 (Val) - 314 (Leu), 24 (Leu) - 314 (Leu), or 1 (Met) - 314
XX CC (Leu), of a 314-amino acid Mus musculus sequence (mmp); 43 (Val) - 275
XX CC (Arg), 19 (Arg) - 275 (Arg), 43 (Val) - 312 (Leu), 19 (Arg) - 312 (Leu),
XX CC or 1 (Met) - 312 (Leu) of a 312-amino acid Homo sapiens sequence (hsp) or
XX CC of a 233 fusion polypeptide sequence. The ZTRYP1 polypeptide is useful
XX CC for treating a dysfunction associated with contractile tissues (e.g.
XX CC lung, gastrointestinal, heart, vas deferens or prostate tissues), and may
XX CC be used for suppressing or enhancing contractility in vivo. In
XX CC particular, the ZTRYP1 polypeptide is useful for treating or diagnosing
XX CC cardiovascular disease (e.g. inflammatory actions in heart), inflammatory
XX CC bowel disease, arthritis, infertility, impotence or other male
XX CC reproductive dysfunction. The polypeptide is also useful in birth
XX CC control, in vitro fertilisation, or inducing birth. This sequence
XX CC represents a primer used to identify mouse tryptase-like protein Ztryp-1
XX SQ Sequence 21 BP; 1 A; 9 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 7.6e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1195 GCGCTGCTCCCTCTTCCGG 1213
DB 2 GCGCTGCTCCCTCTTCCRG 20

RESULT 863
ADC01969/c
ID ADC01969 standard; DNA; 21 BP.
XX AC ADC01969;
XX DT 18-DEC-2003 (first entry)
XX DE Human zsig37 cDNA sequencing primer #26.
XX KW Human; zsig37; ss; chromosome 17q25.2; vascular occlusion; vasodilation;
XX KW adipocyte complement related protein; vascular injury;
XX KW vascular reconstruction; trauma; stroke; aneurysm; plaque rupture;
XX KW vasculature; diabetes; atherosclerosis; blood flow; vasorelaxant;
XX KW tranquiliser; vulnery; cerebroprotective; antiatherosclerotic;
XX KW sequencing; primer.
XX OS Homo sapiens.
XX XX US6544946-B1.
XX PI 08-APR-2003.
XX PD 19-JUL-2000; 2000US-00619740.
XX PF 19-FEB-1999; 99US-00253604.
XX PR 22-NOV-1999; 99US-00444794.
XX PR 17-FEB-2000; 2000US-00506855.
XX XX (ZYMO) ZYMOGENETICS INC.
XX PA

PI Sheppard PO, Lasser GW, Bishop PD;
XX WPI; 2003-707011/67.
XX XX Minimizing vascular occlusion or inducing vasodilation within the
XX PT vasculature of a mammal, by administering an adipocyte complement related
XX PT protein, zsig37 that promotes blood flow.
XX XX Example 9; SEQ ID NO 41; 44pp; English.
XX XX The invention relates to a method for minimising vascular occlusion or
XX CC inducing vasodilation within a mammal, involving administering a
XX CC formulation comprising an adipocyte complement related protein, zsig37.
XX CC The method is useful for minimising vascular occlusion and inducing
XX CC vasodilation in a mammal suffering from acute vascular injury which may
XX CC be due to vascular reconstruction, trauma, stroke or aneurysm. The
XX CC vascular injury is due to plaque rupture, degradation of the vasculature,
XX CC complications associated with diabetes and atherosclerosis.
XX CC Administration of the formulation promotes blood flow or elicits a
XX CC vasorelaxant response. This sequence represents a primer used to sequence
XX CC cDNA encoding the human zsig37 polypeptide of the invention.
XX SQ Sequence 21 BP; 5 A; 4 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 7.6e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 822 GAAGTCCCTCCACCCCTGTC 840
DB 21 GAAGTCCCTCTCACGTGTC 3

RESULT 864
ADC17380
ID ADC17380 standard; DNA; 21 BP.
XX AC ADC17380;
XX DT 18-DEC-2003 (first entry)
XX DE Mouse serine protease ztryp1 primer seq id 5.
XX KW cardiant; antiinflammatory; antiasthmatic; antiarthritic;
XX KW antiinfertility; contraceptive; serine protease; cancer; immune disorder;
XX KW Ztryp1; inflammatory disorder; reproductive disorder; infertility;
XX KW contraceptive; testicular disorder; heart disorder; asthma; arthritis;
XX KW mouse; PCR; primer; ss.
XX OS Mus sp.
XX XX US2003119035-A1.
XX PD 26-JUN-2003.
XX PF 01-OCT-2002; 2002US-00261845.
XX XX 09-AUG-2000; 2000US-00636382.
XX XX (ZYMO) ZYMOGENETICS INC.
XX PI Presnell SR, Taft DW;
XX XX WPI; 2003-645495/61.
XX DR New Ztryp1 gene, useful in diagnosing diseases associated with the ztryp1
XX PT gene, e.g., cancer or immune disorders.
XX PS Example 1; SEQ ID NO 5; 44pp; English.
XX XX The invention describes a new isolated polynucleotide encoding a serine
XX CC protease polypeptide comprising a sequence of amino acid residues that is
XX CC 90% identical to a sequence comprising: amino acid residues 44-276, 24-

CC 276, 44-314, 24-314 or 1-314 of the 314-amino acid sequence or amino acid
 CC residues 43-275, 19-275, 43-312, 19-312 or 1-312 of the 312-amino acid
 CC sequence; or 233 amino acids. The polynucleotide is useful in diagnosing
 CC diseases associated with the ztryl gene, e.g. cancer or immune
 CC disorders. Ztryl proteins are useful for treating inflammatory,
 CC reproductive (e.g. infertility and contraceptive), testicular and heart
 CC disorders. They are also useful for treating asthma and arthritis. This
 CC sequence represents a primer used in the isolation and analysis of mouse
 CC serine protease ztryl.

SQ Sequence 21 BP; 1 A; 9 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1195 GGCGTCCCTCTTTCGG 1213
 ||| ||||| |||||
 DB 2 GGTGTCCCTCTTCTG 20

RESULT 865
 AAD5914/C
 ID AAD5914 standard; DNA; 21 BP.
 AC AAD5914;
 XX
 AC AAD5914;
 XX
 DT 18-DEC-2003 (first entry)
 XX
 DE ZC18687 oligo used to identify mouse zisg37 DNA.
 XX
 KW Adipocyte complement related protein; collagenous surface pacification;
 KW wound healing; tumour metastasis; gene therapy; thrombogenic; mouse;
 KW Acrp; zisg37; ss.
 XX
 OS Mus musculus.
 XX
 PN US2003144208-A1.
 XX
 PD 31-JUL-2003.
 XX
 PF 07-FEB-2003; 2003US-00360186.
 XX
 PR 19-FEB-1999; 99US-00253604.
 PR 22-NOV-1999; 99US-00444794.
 PR 17-FEB-2000; 2000US-00506855.
 PR 19-JUL-2000; 2000US-00619740.
 XX
 PA (SHEP/) SHEPPARD P O.
 PA (LASS/) LASSER G W.
 PA (BISH/) BISHOP P D.
 XX
 PI Sheppard PO, Lasser GW, Bishop PD;
 XX
 DR WPI; 2003-755532/71.
 XX
 PT Promoting blood flow within the vasculature of a mammal, comprising
 PT administering an adipocyte complement related protein to reduce
 PT thrombogenic and complement activity within the vasculature.
 XX
 PS Example 9; Page 29; 48pp; English.
 XX
 CC The invention relates to a method of promoting blood flow within the
 CC vasculature of a mammal. The method involves administering an adipocyte
 CC complement related protein (Acrp) to the mammal to reduce and complement
 CC activity within the vasculature. Methods and compositions of the
 CC invention are useful in promoting blood flow within the vasculature of a
 CC mammal, in pacifying collagenous surfaces, in modulating wound healing or
 CC mediating tumour metastasis. The invention is also useful in gene
 CC therapy. The present sequence is an oligo used to identify mouse
 CC adipocyte complement related protein homologue (zisg37) DNA
 XX
 SQ Sequence 21 BP; 5 A; 4 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 822 GAAGTCCTCCCTCACCCTGTC 840
 ||| ||||| |||||
 DB 21 GAAGTCCTCCCTCACCCTGTC 3

RESULT 866
 ADD14411/C
 ID ADD14411 standard; DNA; 21 BP.
 XX
 AC ADD14411;
 XX
 DT 01-JAN-2004 (first entry)
 XX
 DE Human src biomarker reverse PCR primer SEQ ID NO:600.
 XX
 KW predictor set; protein tyrosine kinase activity modulator;
 KW protein tyrosine kinase pathway; protein tyrosine kinase; cytostatic;
 KW gene therapy; drug sensitivity; genetic profile; cancer; human;
 KW PCR primer; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN WO2003062395-A2.
 XX
 PD 31-JUL-2003.
 XX
 PF 17-JAN-2003; 2003WO-US001981.
 XX
 PR 18-JAN-2002; 2002US-0350061P.
 XX
 PA (BRIM) BRISTOL-MYERS SQUIBB CO.
 XX
 PI Huang F, Fairchild CR, Lee FY, Shaw P;
 XX
 DR WPI; 2003-636735/60.
 XX
 PT New polynucleotides and polypeptides for predicting the activity of
 PT compounds that interact with protein tyrosine kinases and/or protein
 PT tyrosine kinase pathways.
 XX
 PS Example 2; SEQ ID NO 600; 139pp; English.
 XX
 CC The present invention describes a predictor set comprising a plurality of
 CC polynucleotides or polypeptides whose expression pattern is predictive of
 CC the response of cells to treatment with a compound that modulates protein
 CC tyrosine kinase activity or members of the protein tyrosine kinase
 CC pathway. Also described: (1) predicting whether a compound is capable of
 CC modulating the activity of cells, comprising obtaining a sample of cells,
 CC determining whether the cells express a plurality of markers, and
 CC correlating the expression of the markers to the compound's ability to
 CC modulate the activity of the cells; (2) a plurality of cell lines for
 CC identifying polynucleotides and polypeptides whose expression levels
 CC correlate with compound sensitivity or resistance of cells associated
 CC with a disease state; and (3) identifying polynucleotides and
 CC polypeptides that predict compound sensitivity or resistance of cells
 CC associated with a disease state, comprising subjecting the plurality of
 CC cell lines to one or more compounds, analysing the expression pattern of
 CC a microarray of polynucleotides or polypeptides, and selecting
 CC polynucleotides or polypeptides that predict the sensitivity or
 CC resistance of cells associated with a disease state by using the
 CC expression pattern of the microarray. The polynucleotides and
 CC polypeptides have cytostatic activities, and can be used in gene therapy.
 CC The polynucleotides and polypeptides are useful in predicting the
 CC activity of compounds that interact with protein tyrosine kinases and/or
 CC protein tyrosine kinase pathways. These may be used in determining drug
 CC sensitivity in patients to allow the development of individualized
 CC genetic profiles which aid in treating diseases and disorders (e.g.

potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes are designed to cleave the target sequences and thereby inhibit relA expression, making them potentially useful for treating rheumatoid arthritis, restenosis and asthma as well as for increasing tolerance to transplanted tissues. The potential as immunosuppressive properties of a ribozyme that cleaves relA mRNA means that uses are limited to local delivery, acute indications or ex vivo treatment. (Updated on 25-MAR-2003 to correct PI field.)

Sequence 15 BP; 4 A; 5 C; 1 G; 0 T; 5 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 15;
Best Local Similarity 71.4%; Pred. No. 5.9e+02;
Matches 10; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 538 CCCATCTTTGACAA 551
DB 1 CCCAUCUUUGACAA 14

RESULT 869
AAFS0620
ID AAF50620 standard; DNA; 15 BP.
XX
AC AAF50620;
XX
DT 30-MAR-2001 (first entry)
XX
DE IGF-I oligonucleotide #1580.
XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
XX Homo sapiens.
OS
XX WO200078341-A1.
XX
XX PD 28-DEC-2000.
XX PF 21-JUN-2000; 2000WO-AU000693.
XX PR 21-JUN-1999; 99US-0140345P.
XX PA (MURD-) MURDOCH CHILDRENS RES INST.
XX PI Wright CJ, Werther GA, Edmondson SR;
XX WPI; 2001-041421/05.
XX
XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.
XX
XX Example 8; Page 71; 201pp; English.
XX The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, ptyriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic

ichthyosis, ptyriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 2 A; 8 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1103 ACCGGCCCCCTGAC 1116
DB 1 ACCGGCCCCCTGAC 14

RESULT 870
AAFS0616
ID AAF50616 standard; DNA; 15 BP.
XX
AC AAF50616;
XX
DT 30-MAR-2001 (first entry)
XX
DE IGF-I oligonucleotide #1576.
XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
XX Homo sapiens.
OS
XX WO200078341-A1.
XX
XX PD 28-DEC-2000.
XX PF 21-JUN-2000; 2000WO-AU000693.
XX PR 21-JUN-1999; 99US-0140345P.
XX PA (MURD-) MURDOCH CHILDRENS RES INST.
XX PI Wright CJ, Werther GA, Edmondson SR;
XX WPI; 2001-041421/05.
XX
XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.
XX
XX Example 8; Page 71; 201pp; English.
XX The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, ptyriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic

CC disease, kidney disease, hyperproliferation of the inside of blood
XX vessels or any other hyperplasia
SQ Sequence 15 BP; 1 A; 8 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1100 GGTACCGGCCCT 1113
Db 2 GGTACCGGCCCT 15

RESULT 871
ABX04015/c
ID ABX04015 standard; DNA; 15 BP.
XX
AC ABX04015;
XX
XX
XX 09-JAN-2003 (first entry)
XX
XX Resistance genes mefa & mefe DNA fragment.
XX
XX Detection; probe; diagnosis; oral disease; paradontitis; caries; therapy;
XX polymorphism; virulence factor; antibiotic resistance gene; prognosis;
XX oral infection; detection; pathogen; coronary heart disease;
XX diabetic symptom; ss.
XX Unidentified.
XX DE20110013-U1.
XX
XX 18-OCT-2001.
XX
XX 13-MAR-2001; 2001DE-02010013.
XX
XX 13-MAR-2001; 2001DE-01012348.
XX
XX 13-MAR-2001; 2001DE-02010013.
XX
XX (ROET/) ROETGER A.
XX
XX WPI; 2001-657777/76.
XX
XX
XX Oligonucleotide array, useful for diagnosing oral diseases, particularly
XX paradontitis, carries human or microbial reference sequences.
XX
XX Claim 10; Page 29; 58pp; German.
XX
XX This invention describes a novel nucleotide carrier with probes used for
XX diagnosis of oral diseases, particularly paradontitis, but also caries,
XX especially to identify genetic predisposition (as indicated by
XX polymorphisms) to disease and to identify causative microorganisms or
XX their associated virulence factors and antibiotic resistance genes, e.g.
XX for selection of therapy and for prognosis. They are also useful for
XX research into oral infections. The carriers allow simultaneous detection
XX of both host and pathogen parameters, providing quickly and simply an
XX individual's paradontitis profile, including detection of pathogens that
XX are associated with increased risk of coronary heart diseases and/or
XX aggravation of diabetic symptoms, and of opportunistic pathogens.
XX ABX03870-ABX04044 represent DNA fragments used to illustrate the method
XX of the invention
XX
XX Sequence 15 BP; 1 A; 2 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 183 CATAGACAGACCA 196
Db 14 CATAGACAGACCA 1

RESULT 872
AAx74928
ID AAX74928 standard; RNA; 17 BP.
XX
AC AAX74928;
XX
XX 28-JUL-1999 (first entry)
XX
XX Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #456.
XX
XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
XX KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
XX tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
XX fms-like tyrosine kinase 1; kinase insert domain containing receptor;
XX foetal liver kinase 1; ss.
XX
XX Mus sp.
XX
XX WO9715662-A2.
XX
XX 01-MAY-1997.
XX
XX 25-OCT-1996; 96WO-US017480.
XX
XX 26-OCT-1995; 95US-0005974P.
XX
XX 11-JAN-1996; 96US-00584040.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX (CHIR) CHIRON CORP.
XX
XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
XX WPI; 1997-259017/23.
XX
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
XX stability - useful for treating e.g. tumour angiogenesis, psoriasis,
XX rheumatoid arthritis, etc., in a human patient.
XX
XX Claim 4; Page 168; 218pp; English.
XX
XX The present invention describes nucleic acid molecules which modulate the
XX synthesis, expression and/or stability of a mRNA encoding 1 or more
XX receptors of vascular endothelial growth factor (VEGF). A patient
XX (preferably human) having a condition associated with the level of the
XX fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
XX receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
XX angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
XX treated by administering the nucleic acid molecule or the expression
XX vector to the patient. AAX67275 to AAX75752 represent specific examples
XX of nucleic acid molecules from the present invention
XX
XX Sequence 17 BP; 4 A; 4 C; 3 G; 0 T; 6 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;
Best Local Similarity 71.4%; Pred. No. 6.7e+02;
Matches 10; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 539 CCATCTTTGACAAAG 552
Db 2 CCAUCUUGACAAAG 15

RESULT 873
AAx71437
ID AAX71437 standard; RNA; 17 BP.
XX
AC AAX71437;
XX
XX 28-JUL-1999 (first entry)
XX
XX Human KDR VEGF receptor hammerhead ribozyme substrate #449.
XX

KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX
OS Homo sapiens.
XX
XX WO9715662-A2.
PN
XX
XX 01-MAY-1997.
PD
XX
XX 25-OCT-1996; 96WO-US017480.
PF
XX
XX 26-OCT-1995; 95US-0005974P.
PR
XX 11-JAN-1996; 96US-00584040.
PR
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX (CHIR) CHIRON CORP.
PA
XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
PI
XX WPI; 1997-259017/23.
DR
XX
XX 25-OCT-1996; 96WO-US017480.
PF
XX
XX 26-OCT-1995; 95US-0005974P.
PR
XX 11-JAN-1996; 96US-00584040.
PR
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX (CHIR) CHIRON CORP.
PA
XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
PI
XX WPI; 1997-259017/23.
DR
XX
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT rheumatoid arthritis, etc., in a human patient.
XX
XX Claim 4; Page 110; 218pp; English.
XX
XX The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention
XX
XX Sequence 17 BP; 4 A; 4 C; 6 G; 0 T; 3 U; 0 Other;
SQ
Query Match 0.8%; Score 14; DB 1; Length 17;
Best Local Similarity 85.7%; Pred. No. 6.7e+02;
Matches 12; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
Qy 819 GGAGAGTCCCTCA 832
Db 1 GGAGAGUCCCUCA 14
RESULT 874
AAX74911
ID AAX74911 standard; RNA; 17 BP.
XX
XX AAX74911;
AC
XX
XX 28-JUL-1999 (first entry)
DT
XX
XX Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #439.
DE
XX
XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX
XX Mus sp.
OS
XX
XX WO9715662-A2.
PN
XX
XX 01-MAY-1997.
PD

XX 25-OCT-1996; 96WO-US017480.
PF
XX
XX 26-OCT-1995; 95US-0005974P.
PR
XX 11-JAN-1996; 96US-00584040.
PR
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX (CHIR) CHIRON CORP.
PA
XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
PI
XX WPI; 1997-259017/23.
DR
XX
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT rheumatoid arthritis, etc., in a human patient.
XX
XX Claim 4; Page 168; 218pp; English.
XX
XX The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention
XX
XX Sequence 17 BP; 1 A; 5 C; 6 G; 0 T; 5 U; 0 Other;
SQ
Query Match 0.8%; Score 14; DB 1; Length 17;
Best Local Similarity 71.4%; Pred. No. 6.7e+02;
Matches 10; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
Qy 1033 GACTTGGCCTGCG 1046
Db 4 GACUUGGCGCUGC 17
RESULT 875
AAX74927
ID AAX74927 standard; RNA; 17 BP.
XX
XX AAX74927;
AC
XX
XX 28-JUL-1999 (first entry)
DT
XX
XX Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #455.
DE
XX
XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX
XX Mus sp.
OS
XX
XX WO9715662-A2.
PN
XX
XX 01-MAY-1997.
PD
XX
XX 25-OCT-1996; 96WO-US017480.
PF
XX
XX 26-OCT-1995; 95US-0005974P.
PR
XX 11-JAN-1996; 96US-00584040.
PR
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX (CHIR) CHIRON CORP.
PA
XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
PI
XX WPI; 1997-259017/23.
DR

DR WPI; 1997-259017/23.
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT rheumatoid arthritis, etc., in a human patient.
XX
XX
PS Claim 4; Page 168; 218pp; English.
XX
XX The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC receptor (TDR)) and/or ocular diseases, psoriasis and rheumatoid arthritis) can be
CC angiogenesis, treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX57275 to AAX5752 represent specific examples
CC of nucleic acid molecules from the present invention
XX
SQ Sequence 17 BP; 5 A; 4 C; 3 G; 0 T; 5 U; 0 Other;
Query Match 0.8%; Score 14; DB 1; Length 17;
Best Local Similarity 71.4%; Pred. No. 6.7e+02;
Matches 10; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 539 CCATCTTTGACAAG 552
DB 3 CCAUCUUGACAAG 16
RESULT 876
AAV97498/C
ID AAV97498 standard; RNA; 17 BP.
AC AAV97498;
XX
XX 17-MAR-1999 (first entry)
DT
XX
XX Human EGF-R target sequence nucleotide position 2416.
DE
XX Human; epidermal growth factor receptor; EGFR; EGF-R; target sequence;
KW hammerhead ribozyme; hairpin ribozyme; inhibition; cell proliferation;
KW cancer; genetic drift; detection; mutation; ss.
XX
XX Homo sapiens.
OS
XX
XX WO9833893-A2.
FN
XX
XX 06-AUG-1998.
PD
XX
XX 14-JAN-1998; 98WO-US000730.
PF
XX
XX 31-JAN-1997; 97US-0036476P.
PR
XX 04-DEC-1997; 97US-00985162.
PR
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX (UYAS-) UNIV ASTON.
PA
XX Akhtar S, Fell P, Mcswiggen JA;
PI
XX WPI; 1998-437449/37.
PD
XX
XX 14-JAN-1998; 98WO-US000730.
PF
XX
XX 31-JAN-1997; 97US-0036476P.
PR
XX 04-DEC-1997; 97US-00985162.
PR
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX (UYAS-) UNIV ASTON.
PA
XX Akhtar S, Fell P, Mcswiggen JA;
PI
XX WPI; 1998-437449/37.
PD
XX
XX Enzymatic nucleic acids - which cleave RNA derived from an epidermal
PT growth factor receptor, useful for inhibiting cell proliferation and for
PT treating cancers.
XX
XX Claim 5; Page 73; 109pp; English.
PS
XX
XX The present invention describes enzymatic nucleic acid molecules (NAMS)
CC which specifically cleave RNA derived from an epidermal growth factor
CC receptor (EGF-R) gene. AAV97221 to AAV98043 and AAV98979 to AAV99090
CC represent specifically claimed target sequence from human EGF-R. AAV98044
CC to AAV98866 and AAV98867 to V9878 represent hammerhead ribozymes and
CC hairpin ribozymes respectively for human EGF-R. The NAMS are useful for
CC cleaving EGF-R RNA in the treatment of a condition associated with EGF-R
CC expression levels e.g. to inhibit cell proliferation in the prevention or
CC treatment of cancers. The NAMS can also be used as diagnostic tools to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of EGF-R RNA in a cell
XX
SQ Sequence 17 BP; 5 A; 4 C; 3 G; 0 T; 5 U; 0 Other;
Query Match 0.8%; Score 14; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.7e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

CC hairpin ribozymes respectively for human EGF-R. The NAMS are useful for
CC cleaving EGF-R RNA in the treatment of a condition associated with EGF-R
CC expression levels e.g. to inhibit cell proliferation in the prevention or
CC treatment of cancers. The NAMS can also be used as diagnostic tools to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of EGF-R RNA in a cell
XX
SQ Sequence 17 BP; 5 A; 5 C; 4 G; 0 T; 3 U; 0 Other;
Query Match 0.8%; Score 14; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.7e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1366 CTTGATAGCGACGG 1379
DB 14 CTTGATAGCGACGG 1
RESULT 877
AAV97497/C
ID AAV97497 standard; RNA; 17 BP.
AC AAV97497;
XX
XX 17-MAR-1999 (first entry)
DT
XX
XX Human EGF-R target sequence nucleotide position 2412.
DE
XX Human; epidermal growth factor receptor; EGFR; EGF-R; target sequence;
KW hammerhead ribozyme; hairpin ribozyme; inhibition; cell proliferation;
KW cancer; genetic drift; detection; mutation; ss.
XX
XX Homo sapiens.
OS
XX
XX WO9833893-A2.
FN
XX
XX 06-AUG-1998.
PD
XX
XX 14-JAN-1998; 98WO-US000730.
PF
XX
XX 31-JAN-1997; 97US-0036476P.
PR
XX 04-DEC-1997; 97US-00985162.
PR
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX (UYAS-) UNIV ASTON.
PA
XX Akhtar S, Fell P, Mcswiggen JA;
PI
XX WPI; 1998-437449/37.
PD
XX
XX Enzymatic nucleic acids - which cleave RNA derived from an epidermal
PT growth factor receptor, useful for inhibiting cell proliferation and for
PT treating cancers.
XX
XX Claim 5; Page 73; 109pp; English.
PS
XX
XX The present invention describes enzymatic nucleic acid molecules (NAMS)
CC which specifically cleave RNA derived from an epidermal growth factor
CC receptor (EGF-R) gene. AAV97221 to AAV98043 and AAV98979 to AAV99090
CC represent specifically claimed target sequence from human EGF-R. AAV98044
CC to AAV98866 and AAV98867 to V9878 represent hammerhead ribozymes and
CC hairpin ribozymes respectively for human EGF-R. The NAMS are useful for
CC cleaving EGF-R RNA in the treatment of a condition associated with EGF-R
CC expression levels e.g. to inhibit cell proliferation in the prevention or
CC treatment of cancers. The NAMS can also be used as diagnostic tools to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of EGF-R RNA in a cell
XX
SQ Sequence 17 BP; 4 A; 6 C; 2 G; 0 T; 5 U; 0 Other;
Query Match 0.8%; Score 14; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.7e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1367 TTGATAGCGACGG 1380
 Db 17 TTGATAGCGACGG 4

RESULT 878
 ABK02332
 ID ABK02332 standard; RNA; 17 BP.
 XX AC ABK02332;
 XX DT 12-MAR-2002 (first entry)
 XX DE Human NOGO Amberzyme #4.
 XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
 KW DNazyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
 KW MCL; immunocytoma; IMC; immune thrombocytopenia; stroke; dementia;
 KW inflammatory arthropathy; central nervous system injury;
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
 KW Parkinson's disease; ataxia; Huntington's disease;
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
 XX Homo sapiens.
 OS Synthetic.
 OS WO200159103-A2.
 FN 16-AUG-2001.
 XX 09-FEB-2001; 2001WO-US0004273.
 XX 11-FEB-2000; 2000US-0181797P.
 PR 28-FEB-2000; 2000US-0185516P.
 PR 06-MAR-2000; 2000US-0187128P.
 XX (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MCSW/) MCSWIGGEN J.
 PA (CHOW/) CHOWRIRA B M.
 XX Blatt L, Mcswiggen J, Chowrira BM;
 XX WPI; 2001-607195/69.
 Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
 PT constructs, which down regulate expression of a CD20 gene or neurite
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
 PT central nervous system injury.
 XX Claim 88; Page 130; 200pp; English.
 The invention relates to a nucleic acid molecule which down regulates
 CC expression of a CD20 gene and a nucleic acid molecule which down
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
 CC DNazyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or
 CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
 CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA
 CC of CD20 in the presence of a divalent cation that is preferably Mg²⁺.
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
 CC the cell and treat a patient having a condition associated with the level
 CC of CD20. The treatment may further comprise the use of one or more
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic

CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
 CC immune thrombocytopenia, and inflammatory arthropathy. The NOGO-
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the
 CC presence of a divalent cation that is preferably Mg²⁺. Furthermore, the
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
 CC cell and treat a patient having a condition associated with the level of
 CC NOGO. The treatment may further comprise the use of one or more
 CC therapies. In particular, the NOGO-targeting nucleic acid may be used to
 CC treat central nervous system (CNS) injury and cerebrovascular accident
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
 CC disease, muscular dystrophy, and/or other neurodegenerative disease
 CC states which respond to the modulation of NOGO expression. The present
 CC sequence is an amberzyme molecule of the invention
 XX
 SQ Sequence 17 BP; 1 A; 8 C; 6 G; 0 T; 2 U; 0 Other;
 Query Match 0.8%; Score 14; DB 1; Length 17;
 Best Local Similarity 85.7%; Pred. NO. 6.7e+02;
 Matches 12; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
 QY 83 CCGCGGGCTCTGAG 96
 Db 4 CCGCGGGCTCTGAG 17
 RESULT 879
 ABK01785
 ID ABK01785 standard; RNA; 17 BP.
 XX AC ABK01785;
 XX DT 12-MAR-2002 (first entry)
 XX DE Human NOGO Zinzyme #107.
 XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
 KW DNazyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
 KW MCL; immunocytoma; IMC; immune thrombocytopenia; stroke; dementia;
 KW inflammatory arthropathy; central nervous system injury;
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
 KW Parkinson's disease; ataxia; Huntington's disease;
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
 XX Homo sapiens.
 OS Synthetic.
 OS WO200159103-A2.
 FN 16-AUG-2001.
 XX 09-FEB-2001; 2001WO-US0004273.
 XX 11-FEB-2000; 2000US-0181797P.
 PR 28-FEB-2000; 2000US-0185516P.
 PR 06-MAR-2000; 2000US-0187128P.
 XX (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MCSW/) MCSWIGGEN J.
 PA (CHOW/) CHOWRIRA B M.
 XX Blatt L, Mcswiggen J, Chowrira BM;
 XX WPI; 2001-607195/69.
 Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
 PT constructs, which down regulate expression of a CD20 gene or neurite
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
 PT central nervous system injury.
 XX Claim 88; Page 130; 200pp; English.
 The invention relates to a nucleic acid molecule which down regulates
 CC expression of a CD20 gene and a nucleic acid molecule which down
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
 CC DNazyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or
 CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
 CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA
 CC of CD20 in the presence of a divalent cation that is preferably Mg²⁺.
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
 CC the cell and treat a patient having a condition associated with the level
 CC of CD20. The treatment may further comprise the use of one or more
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic

Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.

Claim 88; Page 97; 200pp; English.

The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a DNAzyme) or an inozyme (an endolytic nucleic acid cleaving a RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or an amberzyme (cleaving RNA with an NGN triplet), a zinczyme (cleaving RNA with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably Mg^{2+} . Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more therapies. In particular, the CD20 targeting nucleic acid may be used to treat Hodgkin's lymphoma, leukemia, B-cell lymphoma, low-grade or follicular non-Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic leukemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, lymphoma (MCL), immunocytoma (IMC), and inflammatory arthropathy. The NGO-targeting nucleic acid is used to cleave RNA of the NGO gene in the presence of a divalent cation that is preferably Mg^{2+} . Furthermore, the nucleic acid may be contacted with a cell to reduce NGO activity of the cell and treat a patient having a condition associated with the level of NGO. The treatment may further comprise the use of one or more therapies. In particular, the NGO-targeting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modulation of NGO expression. The present invention is a zinczyme molecule of the invention

Sequence 17 BP: 2 A; 7 C; 6 G; 0 T; 2 U; 0 Other;

```

every Match          0.8%; Score 14; DB 1; Length 17;
Best Local Similarity 85.7%; Pred. No. 6.7e+02;
Matches 12; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

```

83 C C C G G G G C T C T G A G 96

3 CCGCGGCTCTGAG 16

088 TLT

00760

ABK00760 standard; RNA; 17 BP.

ARK00760:

12-MAR-2002 (first entry)

SECRET

Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebrotective; nootropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNazyme; irozyme; G-cleaver; amberzyme; zinczyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia; human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCL; immunocytooma; IMC; immune thrombocytopenia; stroke; dementia; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; Parkinson's disease; ataxia; Huntington's disease; Creutzfeldt-Jacob disease; muscular dystrophy; neurodegenerative disease

Homo sapiens.

Synthetic.

WO200159103-A2.

16-AUG-2001.

09-FEB-2001: 2001WO-US004273.

11-FEB-2000: 2000IS-0181797P

II-FEB-2000; 2000US=01851797F;
28-FEB-2000; 2000US=0185516P;

26-FEB-2000; 2000US-0183316F;
06-MAR-2000; 2000US-0187128P.

(RTRO-) RTROZYME PHARM INC.

(RIBU-) RIBOZYME
(RIAT/) BLATT L.

(BPAI//) BRATT, D.
(MCSW//) MCSWIGGEN, J.

(CHOW//) CHOWRIRA B M.

Blatt L. McSwiggen J. Chowrira BM:

WPT: 2001-607195/69

Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.

Claim 88: page 78: 200pp: English.

The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a DNAzyme) or an inozyme (an endolytic nucleic acid cleaving an RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or an ambzyme (cleaving RNA with an NGN triplet), a zinczyme (cleaving RNA with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably Mg^{2+} . Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more of CD20. In particular, the CD20 targeting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, immune thrombocytopenia, and inflammatory arthropathy. The NGO-targeting nucleic acid is used to cleave RNA of the NGO gene in the presence of a divalent cation that is preferably Mg^{2+} . Furthermore, the nucleic acid may be contacted with a cell to reduce NGO activity of the cell and treat a patient having a condition associated with the level of NGO. The treatment may further comprise the use of one or more of NGO. In particular, the NGO-targeting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modulation of NGO expression. The present invention is an incyzyme of the invention.

Sequence 17 BP: 2 A: 7 C: 6 G: 0 T: 2 U: 0 Other:

0.8%: Score 14: DB 1: Length 17:

```

Query Match      0.8%; DB 1; length 17,
Score 14; pred. No. 6.7e+02;
Best Local Similarity 85.7%;

```

Best Local Similarity	85.7%	Prod: NO: 0.76+0.27	
Matches	12:	Conservative	2: Mismatches 0: Indels 0: Gaps

83 CCCCCCTTGG 96

1 CCGGCTTTCAG 14
|||||:
|||

RESULT 881

```

ABL46440/C
ID ABL46440 standard; RNA; 17 BP.
XX
XX ABL46440;
AC
XX
XX 27-JUN-2003 (first entry)
DT
XX
DE Human GRID hammerhead ribozyme substrate oligonucleotide #73.
DE
XX
XX Human; Grb2-related with Insert Domain; GRID; T-cell;
KW co-stimulatory adaptor protein; tissue rejection; graft rejection;
KW leukaemia; cytostatic; ss.
XX
XX Homo sapiens.
OS
XX WO200162911-A2.
XX
XX 30-AUG-2001.
XX
XX 23-FEB-2001; 2001WO-US005957.
XX
XX 24-FEB-2000; 2000US-0184594P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX (GLAXO) GLAXO GROUP LTD.
XX
XX Jarvis T, Von Carlowitz I, Mcswiggen JA, Hamblin PA, Ellis JH;
XX WPI; 2001-550088/61.
XX
XX New nucleic acid(s) for regulating the Grb2-related with Insert Domain
PT (GRID) gene comprises using antisense and enzymatic nucleic acid
PT molecules such as hammerhead ribozymes.
XX
XX Claim 4; Page 60; 108pp; English.
XX
XX The present invention relates to oligonucleotides that downregulate the
CC expression of human Grb2-related with Insert Domain (GRID) gene. GRID is
CC a T-cell co-stimulatory adaptor protein. The oligonucleotides are useful
CC for modulating the expression of GRID, to treat conditions such as
CC tissue/graft rejection and leukaemia. The oligonucleotides can also be
CC administered in conjunction with other therapies such as radiation,
CC chemotherapy and cyclosporin treatment. The present oligonucleotide was
CC used to illustrate the invention
XX
XX Sequence 17 BP; 5 A; 6 C; 1 G; 0 T; 5 U; 0 Other;
XX
XX Query Match 0.8%; Score 14; DB 1; Length 17;
XX Best Local Similarity 100.0%; Pred.No. 6.7e+02;
XX Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 598 TTGTGGAAACTGGA 611
XX |||||||
XX 16 TTGTGGAAACTGGA 3
XX
XX RESULT 882
XX ABL46441/C
XX ID ABL46441 standard; RNA; 17 BP.
XX
XX AC ABL46441;
XX
XX 27-JUN-2003 (first entry)
DT
XX
XX Human GRID hammerhead ribozyme substrate oligonucleotide #74.
DE
XX
XX Human; Grb2-related with Insert Domain; GRID; T-cell;
KW co-stimulatory adaptor protein; tissue rejection; graft rejection;
KW leukaemia; cytostatic; ss.
XX
XX Homo sapiens.
XX
XX WO200162911-A2.
XX

```

PT molecules such as hammerhead ribozymes.

PS Claim 4; Page 60; 108pp; English.

XX The present invention relates to oligonucleotides that downregulate the expression of human Grb2-related with Insert Domain (GRID) gene. GRID is a T-cell co-stimulatory adaptor protein. The oligonucleotides are useful for modulating the expression of GRID, to treat conditions such as tissue/graft rejection and leukaemia. The oligonucleotides can also be administered in conjunction with other therapies such as radiation, chemotherapy and cyclosporin treatment. The present oligonucleotide was used to illustrate the invention

XX Sequence 17 BP; 4 A; 5 C; 3 G; 0 T; 5 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.7e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 598 TTTCGGAACCTGGA 611
Dd 14 TTTCGGAACCTGGA 1

RESULT 884

ABS75015
ID ABS75015 standard; DNA; 17 BP.

AC ABS75015;

XX 24-DEC-2002 (first entry)

DE Human PAPP-Ea associated 17-mer SEQ ID 541.

XX PAPP-E; human; pregnancy associated plasma protein E; abortive; contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis; dysgenetic pregnancy; primer; ss.

OS Homo sapiens.

XX US2002102252-A1.

XX 01-AUG-2002.

XX 06-APR-2001; 2001US-00827998.

XX 26-MAY-2000; 2000US-0207456P.

XX (GUY/) GU Y.

PA (SHAN/) SHANNON M E.

PI Gu Y, Shannon ME;

XX WPI; 2002-697817/75.

XX New isolated nucleic acid encoding an isoform of human pregnancy associated plasma protein E, for preventing or aborting pregnancy.

XX Example 2; Page 146; 353pp; English.

XX This invention describes a novel isolated nucleic acid that encodes one of three new isoforms of human pregnancy associated plasma protein E, hPAPP-E. The products of the invention have abortive and contraceptive activity and can be used for gene therapy or in a vaccine. The nucleic acid, polypeptide encoded by it, or antibody to the polypeptide can be used in pharmaceutical compositions or vaccines for preventing or aborting pregnancy. PAPP-E is used in the antenatal diagnosis of dysgenetic pregnancies. The nucleic acids are used as probes to assess the level of PAPP-E isoform mRNA in chorionic villus samples, and the antibodies can be used to assess the expression levels of PAPP-E isoform proteins in chorionic villus samples, to diagnose dysgenetic pregnancies antenatally. This sequence represents an oligomer used in scanning the human PAPP-E genes described in the disclosure of the invention

XX Sequence 17 BP; 4 A; 4 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.7e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 287 AACTTCGTTCTGCA 300
Dd 4 AACTTCGTTCTGCA 17

RESULT 885

ABS75016
ID ABS75016 standard; DNA; 17 BP.

AC ABS75016;

XX 24-DEC-2002 (first entry)

DE Human PAPP-Ea associated 17-mer SEQ ID 542.

XX PAPP-E; human; pregnancy associated plasma protein E; abortive; contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis; dysgenetic pregnancy; primer; ss.

OS Homo sapiens.

XX US2002102252-A1.

XX 01-AUG-2002.

XX 06-APR-2001; 2001US-00827998.

XX 26-MAY-2000; 2000US-0207456P.

XX (GUY/) GU Y.

PA (SHAN/) SHANNON M E.

PI Gu Y, Shannon ME;

XX WPI; 2002-697817/75.

XX New isolated nucleic acid encoding an isoform of human pregnancy associated plasma protein E, for preventing or aborting pregnancy.

XX Example 2; Page 146; 353pp; English.

XX This invention describes a novel isolated nucleic acid that encodes one of three new isoforms of human pregnancy associated plasma protein E, hPAPP-E. The products of the invention have abortive and contraceptive activity and can be used for gene therapy or in a vaccine. The nucleic acid, polypeptide encoded by it, or antibody to the polypeptide can be used in pharmaceutical compositions or vaccines for preventing or aborting pregnancy. PAPP-E is used in the antenatal diagnosis of dysgenetic pregnancies. The nucleic acids are used as probes to assess the level of PAPP-E isoform mRNA in chorionic villus samples, and the antibodies can be used to assess the expression levels of PAPP-E isoform proteins in chorionic villus samples, to diagnose dysgenetic pregnancies antenatally. This sequence represents an oligomer used in scanning the human PAPP-E genes described in the disclosure of the invention

XX Sequence 17 BP; 4 A; 4 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.7e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 287 AACTTCGTTCTGCA 300
Dd 3 AACTTCGTTCTGCA 16

```
RESULT 886
AAD46160
ID AAD46160 standard; DNA; 17 BP.
XX
AC AAD46160;
XX
XX 29-AUG-2003 (revised)
DT 27-DEC-2002 (first entry)
XX
XX 3900 PCR primer, to clone T. reesei L-arabinitol 4-dehydrogenase gene.
DE
XX
XX Genetically modified fungus; L-arabinose; L-arabinitol 4-dehydrogenase;
KW EC 1.1.1.12; L-xylulose reductase; EC 1.1.1.10; agricultural product;
XX biomass; lactic acid; xylitol; forestry product; fermentable sugar;
KW ethanol; enzyme; PCR; primer; ss.
XX
XX Hypocrea jecorina.
OS
XX
XX WO200266616-A2.
PN
XX
XX 29-AUG-2002.
PD
XX
XX 15-FEB-2002; 2002WO-FI000125.
PF
XX
XX 16-FEB-2001; 2001FI-00000308.
PR
XX
XX (VALW ) VALTION TEKNIILLINEN TUTKIMUSKESKUS.
PA
XX Lonesborough J, Penttilae M, Richard P;
PI
XX WPI; 2002-691618/74.
DR
XX
XX Genetically modified fungus for producing useful products such as
PT ethanol, lactic acid and xylitol, from biomass containing L-arabinose,
PT has increased ability to utilize L-arabinose.
XX
XX Example 2; Page 14; 32pp; English.
XX
XX The invention relates to genetically modified fungus with an increased
CC ability to utilize L-arabinose, where the fungus has been transformed
CC with a DNA sequence encoding an L-arabinitol 4-dehydrogenase (EC 1.1.
CC 1.12) or L-xylulose reductase (EC 1.1.1.10) or both the DNA sequences.
CC Genetically modified fungus is useful for producing useful products from
CC biomass containing L-arabinose. The useful product include ethanol,
CC lactic acid or xylitol preferably ethanol. It is also useful to ferment a
CC carbon source such as biomass comprising agricultural or forestry
CC products and waste products containing L-arabinose and also other
CC pentoses or other fermentable sugars. The present sequence is a PCR
CC primer used to clone T. reesei L-arabinitol 4-dehydrogenase gene.
CC (Updated on 29-AUG-2003 to standardise OS field)
XX
SQ Sequence 17 BP; 5 A; 1 C; 8 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 14; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.7e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 8 AGCGTAAAGGATGG 21
DB 2 AGCGTAAAGGATGG 15
RESULT 887
ABT36202
ID ABT36202 standard; DNA; 17 BP.
XX
XX
AC ABT36202;
XX
XX 12-JUN-2003 (first entry)
DT
XX
XX Tumour suppression related human fukutin oligo SEQ ID No 1839.
DE
XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW
```

```
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; protein chip; gene therapy; tumour suppression;
KW human fukutin; ds.
XX
OS Homo sapiens.
XX
XX WO2003025175-A2.
PN
XX
XX 27-MAR-2003.
PD
XX
XX 17-SEP-2002; 2002WO-IB004208.
PF
XX
XX 17-SEP-2001; 2001PR-00011978.
PR
XX
XX (MOLE-) MOLECULAR ENGINES LAB.
PA
XX
XX Telexman A, Amson R, Tuijnder M;
PI
XX
XX WPI; 2003-313353/30.
DR
XX
XX New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
XX Disclosure; Page 248; 720pp; French.
XX
XX The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC given in the specification, a sequence containing at least 15 consecutive
CC nucleotides from the 17 mer sequence, a sequence with, after optimal
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC hybridizes to them under highly stringent conditions, or the complement
CC of any of them, or the corresponding RNA. The novel isolated nucleic
CC acids of the invention are useful as probes and primers for detecting,
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC component of a gene chip, in vitro as (anti)sense reagents, and for
CC production of recombinant polypeptides. Any of the nucleic acids,
CC polypeptides, vectors containing the nucleic acids, cells containing the
CC vector or antibodies directed against the polypeptides are useful for
CC preparation of pharmaceuticals for prevention and/or treatment of viral
CC diseases that are characterised by development of tumours or cell
CC degeneration, specifically cancer but also Alzheimer's disease and
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC patient samples is useful for diagnosis and/or prognosis of these
CC diseases. The polypeptides can also be used to generate antibodies, and
CC both the polypeptide and antibodies are useful as components of protein
CC chips. The nucleic acid sequences of the invention can be used in gene
CC therapy. This polynucleotide sequence represents a tumour suppression
CC related human fukutin oligonucleotide of the invention
XX
SQ Sequence 17 BP; 4 A; 6 C; 6 G; 1 T; 0 U; 0 Other;
Query Match 0.8%; Score 14; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.7e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1573 TCAGGCGAGGCCAGC 1586
DB 3 TCAGGCGAGGCCAGC 16
RESULT 888
ACA06338
ID ACA06338 standard; RNA; 17 BP.
XX
XX
AC ACA06338;
XX
XX 03-JUN-2003 (first entry)
DT
XX
XX NFkB sub-unit modulating inozyme substrate #157.
DE
XX
XX Enzymatic nucleic acid; nuclear factor kappa B; NFkB; inozyme; zinzyme;
KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
KW lung cancer; prostate cancer; colorectal cancer; brain cancer;
```

oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
cervical cancer; head and neck cancer; ovarian cancer; melanoma;
lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
chemotherapy; paclitaxel, docetaxel, cisplatin, methotrexate, edatrexate;
cyclophosphamide; doxorubicin; fluorouracil carboplatin; edatrexate;
gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
rheumatoid arthritis; restenosis; Crohn's disease; ischaemia;
gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
transplant/graft rejection; reperfusion injury; glomerulonephritis;
allergic airway inflammation; inflammatory bowel disease; infection; ss.
Homo sapiens.
US2002177568-A1.
28-NOV-2002.
23-MAY-2001; 2001US-00864785.
07-DEC-1992; 92US-00987132.
18-MAY-1994; 94US-00245466.
15-AUG-1994; 94US-00291932.
23-DEC-1996; 96US-00777916.
(STIN/) STINCHOMB D T.
(MCSW/) MCSWIGGEN J.
(DRAP/) DRAPER K G.
Stinchcomb DT, Mcswiggen J, Draper KG;
WPI; 2003-340953/32.
Novel enzymatic nucleic acid molecules which down regulates expression of
a sequence encoding a subunit of nuclear factor kappa B useful for
treating cancer, inflammatory disorders and autoimmune diseases.
Claim 3; Page 29; 72pp; English.
The invention describes an enzymatic nucleic acid molecule (I) which down
regulates expression of a sequence encoding a subunit of nuclear factor
kappa B (NFkB), where (I) is an inozyme, zynzyme, g-cleaver or amberzyme
configuration. The enzymatic nucleic acid molecule is adapted to treat
cancer and is useful for down-regulating REL-A activity in a cell, for
treating a patient having a condition associated with the level of REL-A.
(I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
the presence of a divalent cation, especially Mg²⁺. The enzymatic and
antisense nucleic acid molecules are useful for treating breast, lung,
prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
multidrug resistant cancer. The method involves use of other drug
therapies such as monoclonal antibodies, REL-A-specific inhibitors or
chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,
gemcitabine or radiation therapy. The enzymatic and antisense nucleic
acid molecules are also useful for treating inflammatory disease such as
rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
cervical, autoimmune disease, lupus, multiple sclerosis, transplant/graft
rejection, gene therapy applications, ischaemia/reperfusion injury
(central nervous system (CNS) and myocardial), glomerulonephritis,
sepsis, allergic airway inflammation, inflammatory bowel disease or
infection. This sequence represents the substrate of a novel enzymatic
nucleic acid molecule
Sequence 17 BP; 5 A; 5 C; 1 G; 0 T; 6 U; 0 Other;
Query Match 0.8%; Score 14; DB 1; Length 17;
Best Local Similarity 71.4%; Pred. No. 6.7e+02;
Matches 10; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
Qy 538 CCCATCTTTGACAA 551
|||||:|:|:|
Db 3 CCCAUCUUGACAA 16

oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
cervical cancer; head and neck cancer; ovarian cancer; melanoma;
lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
chemotherapy; paclitaxel, docetaxel, cisplatin, methotrexate, edatrexate;
cyclophosphamide; doxorubicin; fluorouracil carboplatin; edatrexate;
gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
rheumatoid arthritis; restenosis; Crohn's disease; ischaemia;
gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
transplant/graft rejection; reperfusion injury; glomerulonephritis;
allergic airway inflammation; inflammatory bowel disease; infection; ss.
Homo sapiens.
US2002177568-A1.
28-NOV-2002.
23-MAY-2001; 2001US-00864785.
07-DEC-1992; 92US-00987132.
18-MAY-1994; 94US-00245466.
15-AUG-1994; 94US-00291932.
23-DEC-1996; 96US-00777916.
(STIN/) STINCHOMB D T.
(MCSW/) MCSWIGGEN J.
(DRAP/) DRAPER K G.
Stinchcomb DT, Mcswiggen J, Draper KG;
WPI; 2003-340953/32.
Novel enzymatic nucleic acid molecules which down regulates expression of
a sequence encoding a subunit of nuclear factor kappa B useful for
treating cancer, inflammatory disorders and autoimmune diseases.
Claim 3; Page 29; 72pp; English.
The invention describes an enzymatic nucleic acid molecule (I) which down
regulates expression of a sequence encoding a subunit of nuclear factor
kappa B (NFkB), where (I) is an inozyme, zynzyme, g-cleaver or amberzyme
configuration. The enzymatic nucleic acid molecule is adapted to treat
cancer and is useful for down-regulating REL-A activity in a cell, for
treating a patient having a condition associated with the level of REL-A.
(I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
the presence of a divalent cation, especially Mg²⁺. The enzymatic and
antisense nucleic acid molecules are useful for treating breast, lung,
prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
multidrug resistant cancer. The method involves use of other drug
therapies such as monoclonal antibodies, REL-A-specific inhibitors or
chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,
gemcitabine or radiation therapy. The enzymatic and antisense nucleic
acid molecules are also useful for treating inflammatory disease such as
rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
cervical, autoimmune disease, lupus, multiple sclerosis, transplant/graft
rejection, gene therapy applications, ischaemia/reperfusion injury
(central nervous system (CNS) and myocardial), glomerulonephritis,
sepsis, allergic airway inflammation, inflammatory bowel disease or
infection. This sequence represents the substrate of a novel enzymatic
nucleic acid molecule
Sequence 17 BP; 5 A; 5 C; 1 G; 0 T; 6 U; 0 Other;
Query Match 0.8%; Score 14; DB 1; Length 17;
Best Local Similarity 71.4%; Pred. No. 6.7e+02;
Matches 10; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
Qy 538 CCCATCTTTGACAA 551
|||||:|:|:|
Db 3 CCCAUCUUGACAA 16

RESULT 889
ABZ61324
ID ABZ61324 standard; RNA; 17 BP.
XX
AC ABZ61324;
DT 21-MAR-2003 (first entry)
XX
XX Human H-Ras DNzyme target #115.
XX
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
XX anti-rheumatic; cancer; AIDS; ss.
XX
XX Homo sapiens.
XX WO200297114-A2.
XX
XX 05-DEC-2002.
XX
XX 29-MAY-2002; 2002WO-US016840.
XX
XX 29-MAY-2001; 2001US-0294140P.
XX 06-JUN-2001; 2001US-0296249P.
XX 10-SEP-2001; 2001US-0318471P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J;
XX
XX WPI; 2003-140484/13.
XX
XX Novel short interfering RNA and enzymatic nucleic acid useful for
XX treating cancer, modulates the expression of a nucleic acid encoding
XX HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
XX Claim 58; Page 113; 185pp; English.
XX
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
XX acid molecule or an enzymatic nucleic acid molecule, that modulates
XX expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
XX human immunodeficiency virus (HIV) or a component of HIV. The nucleic
XX acid molecule of the invention has cytostatic, anti-HIV, and anti-
XX rheumatic activity. The nucleic acid molecules are useful for reducing
XX HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
XX also useful for treating breast, ovarian, colorectal, lung, prostate,
XX bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
XX shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66320 - ABZ66524,
XX ABZ66530 - ABZ66585 represent substrate/target sequences for the human
XX ribozymes of the invention
XX
XX Sequence 17 BP; 2 A; 11 C; 4 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14; DB 1; Length 17;
XX Best Local Similarity 100.0%; Pred. No. 6.7e+02;
XX Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 103 CGCGCGCGCGCGCGCC 116
XXXXXXXXXXXXXXXXXXXX
XX Db 4 CGCGCGCGCGCGCGCC 17
XXXXXXXXXXXXXXXXXXXX
RESULT 890
ABZ62179/c
ID ABZ62179 standard; RNA; 17 BP.
XX
XX AC ABZ62179;
XX
XX 21-MAR-2003 (first entry)
XX
XX Human H-Ras DNzyme target #970.
XX
XX

KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
 KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
 KW anti-rheumatic; cancer; AIDS; ss.
 XX Homo sapiens.
 XX WO200297114-A2.
 XX PD 05-DEC-2002.
 XX PF 29-MAY-2002; 2002WO-US016840.
 XX PR 29-MAY-2001; 2001US-0294140P.
 XX PR 06-JUN-2001; 2001US-0296249P.
 XX PR 10-SEP-2001; 2001US-0318471P.
 XX PA (RIBO-) RIBOZYME PHARM INC.
 XX PI Mcswiggen J;
 XX DR WPI; 2003-140484/13.
 XX PT Novel short interfering RNA and enzymatic nucleic acid useful for
 PT treating cancer, modulates the expression of a nucleic acid encoding
 PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
 XX Claim 58; Page 131; 185pp; English.
 XX The invention relates to a novel short interfering RNA (siRNA) nucleic
 CC acid molecule or an enzymatic nucleic acid molecule, that modulates
 CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
 CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
 CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
 CC rheumatic activity. The nucleic acid molecules are useful for reducing
 CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
 CC also useful for treating breast, ovarian, colorectal, lung, prostate,
 CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
 CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
 CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
 CC ribozymes of the invention
 XX SQ Sequence 17 BP; 2 A; 5 C; 4 G; 0 T; 6 U; 0 Other;
 Query Match 0.8%; Score 14; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 6.7e+02;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 515 TGGAGAGCTGACC 528
 DB 17 TGGAGAGCTGACC 4
 RESULT 891
 ACF62527
 ID ACF62527 standard; DNA; 17 BP.
 XX AC ACF62527;
 XX AC ACF62527;
 XX DT 08-OCT-2003 (first entry)
 XX DE Cancer based on CYP3A5 related oligonucleotide SEQ ID NO:356.
 XX KW Cancer; CYP3A5; irinotecan; pharmaceutical; malignant glioma;
 KW cytochrome p450; subfamily IIIA; nifedipine oxidase; polypeptide 5;
 KW cytostatic; PCR primer; ss.
 XX OS Synthetic.
 XX OS Synthetic.
 XX FN WO2003013534-A2.
 XX PD 20-FEB-2003.
 XX PR 23-JUL-2002; 2002WO-EP008219.
 XX PF

XX 23-JUL-2001; 2001EP-00117608.
 XX 24-MAY-2002; 2002EP-00011710.
 XX PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
 XX XX Heinrich G, Kerb R;
 XX WPI; 2003-268144/26.
 XX PT New use of irinotecan for preparation of compositions for treating cancer
 PT in subject having genome with variant allele comprising cytochrome p450,
 PT subfamily IIIA, polypeptide 5 polynucleotide, termed CYP3A5.
 XX PS Disclosure; Page 42; 86pp; English.
 XX The present invention describes the use of irinotecan (I) or its
 CC derivative for the preparation of a pharmaceutical composition for
 CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic
 CC cancer, or malignant glioma in a subject having a genome with a variant
 CC allele which comprises a cytochrome p450, subfamily IIIA (nifedipine
 CC oxidase), polypeptide 5 (CYP3A5) polynucleotide (II). (I) and (II) have
 CC cytostatic activity. The therapeutic applications of (I) is improved,
 CC since it is possible to individually treat a subject with an appropriate
 CC dosage and/or an appropriate derivative of (I). Therefore, undesirable,
 CC harmful or toxic effects are efficiently avoided. Unnecessary and
 CC potentially harmful treatment of those subjects who do not respond to the
 CC treatment with substances (nonresponders), as well as the development of
 CC drug resistances due to suboptimal drug dosing can be avoided. ACF62200
 CC to ACF62751 and ABM34912 to ABM35013 represent sequences used in the
 CC exemplification of the present invention
 XX SQ Sequence 17 BP; 4 A; 3 C; 4 G; 5 T; 0 U; 1 Other;
 Query Match 0.8%; Score 14; DB 1; Length 17;
 Best Local Similarity 87.5%; Pred. No. 6.7e+02;
 Matches 14; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 QY 52 GCAGTGTGACTGCTGA 67
 DB 2 GCATGTGACTGCTGA 17
 RESULT 892
 ADB21198
 ID ADB21198 standard; DNA; 17 BP.
 XX AC ADB21198;
 XX AC ADB21198;
 XX DT 20-NOV-2003 (first entry)
 XX DE MRPI based cancer related nucleic acid SEQ ID NO:356.
 XX KW irinotecan; colorectal cancer; cervical cancer; gastric cancer;
 KW lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
 KW variant allele; multidrug resistance protein 1; MRPI; cytostatic; gene;
 ds.
 XX OS Unidentified.
 XX OS WO2003013533-A2.
 XX PD 20-FEB-2003.
 XX PF 23-JUL-2002; 2002WO-EP008200.
 XX PR 23-JUL-2001; 2001EP-00117608.
 XX PR 24-MAY-2002; 2002EP-00011710.
 XX PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
 XX PI Heinrich G, Kerb R;
 XX

DR WPI; 2003-354397/33.
XX
PT Use of irinotecan or its derivative for preparation of a pharmaceutical
PT composition for treating cancer in a subject having a genome with a
PT variant allele comprising a multidrug resistance protein 1
PT polynucleotide.
XX
XX Disclosure; Page 51; 100pp; English.
XX
CC The present invention describes a method for the use of irinotecan (I) or
CC its derivative for the preparation of a pharmaceutical composition for
CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC cancer, or malignant glioma in a subject having a genome with a variant
CC allele which comprises a multidrug resistance protein 1 (MRP1)
CC polynucleotide (II). (I) has cytostatic activity. (II) or its derivative
CC can be used for the preparation of a pharmaceutical composition for
CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC cancer, or malignant glioma in a subject, where the subject is a human
CC (preferably African or Asian) or a mouse. The present sequence represents
CC a sequence which is used in the exemplification of the present invention.
XX
SQ Sequence 17 BP; 4 A; 3 C; 4 G; 5 T; 0 U; 1 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 6.7e+02;
Matches 14; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 52 GCAGTGTGACTGCTGA 67
Db 2 GCATGTRACTGCTGA 17
|||:|||||
|||:|||||

RESULT 893
ADB88287
ID ADB88287 standard; DNA; 17 BP.
XX
AC ADB88287;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human UGT1A1 variant allele sequence fragment SEQ ID NO:328.
XX
KW ss; irinotecan; cancer; UGT1A1; cytostatic; topoisomerase I inhibitor;
KW colorectal cancer; cervical cancer; gastric cancer; lung cancer;
KW ovarian cancer; pancreatic cancer; malignant glioma;
KW uridine diphosphate glycosyltransferase1 member A1.
XX
OS Homo sapiens.
XX
PN WO2003013536-A2.
XX
PD 20-FEB-2003.
XX
PF 23-JUL-2002; 2002WO-EP008217.
XX
PR 23-JUL-2001; 2001EP-00117608.
PR 24-MAY-2002; 2002EP-00011710.
XX
XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
XX Heinrich G, Kerb R;
XX
XX WPI; 2003-289896/28.
XX
PT Use of irinotecan to treat cancer patient by determining if patient has
PT variant alleles of UGT1A1 gene, administering increased/decreased amounts
PT of irinotecan based on increased/decreased levels of UGT1A1 gene product.
XX
XX Disclosure; Page 55; 107pp; English.
XX
XX The invention relates to the novel use of irinotecan to treat a patient
CC suffering from cancer. This involves determining if the patient has one
CC or more variant alleles of the UGT1A1 gene, and if the patient has one or

CC more of such variant alleles, irinotecan is administered in an increased
CC or decreased amount in comparison to the amount that is administered
CC without regard to the patient's alleles in the UGT1A1 gene. The invention
CC has cytostatic activity. A composition of the invention acts as a
CC topoisomerase I inhibitor. The method is useful for treating a patient,
CC an animal e.g. mouse or a human, preferably African or Asian, suffering
CC from cancer such as colorectal, cervical, gastric cancer, lung, ovarian,
CC pancreatic cancer or malignant glioma. The present sequence is used in
CC the exemplification of the invention.
XX
SQ Sequence 17 BP; 4 A; 3 C; 4 G; 5 T; 0 U; 1 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 6.7e+02;
Matches 14; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 52 GCAGTGTGACTGCTGA 67
Db 2 GCATGTRACTGCTGA 17
|||:|||||
|||:|||||

RESULT 894
ADB97270
ID ADB97270 standard; DNA; 17 BP.
XX
AC ADB97270;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human MDR1 variant allele sequence fragment SEQ ID NO:356.
XX
KW irinotecan; colorectal cancer; cervical cancer; gastric cancer;
KW lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW multidrug resistance 1; MDR1; cytostatic; human; ds; Cyp3A5; MRP1; MDR1;
KW TOP1.
XX
OS Homo sapiens.
XX
PN WO2003013537-A2.
XX
PD 20-FEB-2003.
XX
PF 23-JUL-2002; 2002WO-EP008218.
XX
PR 23-JUL-2001; 2001EP-00117608.
PR 24-MAY-2002; 2002EP-00011710.
XX
XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
XX Heinrich G, Kerb R;
XX
XX WPI; 2003-268145/26.
XX
PT New use of irinotecan for preparation of pharmaceutical compositions for
PT treating cancer in subject having genome with variant allele comprising
PT multidrug resistance 1 polynucleotide.
XX
XX Disclosure; Page 79; 130pp; English.
XX
XX The invention relates to the novel use of irinotecan or its derivative
CC for the preparation of pharmaceutical compositions for treating
CC colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or
CC malignant glioma in a subject having a genome with a variant allele which
CC comprises a multidrug resistance 1 (MDR1) polynucleotide. A composition
CC of the invention has cytostatic activity. The invention is useful for the
CC preparation of pharmaceutical compositions for treating colorectal,
CC cervical, gastric, lung, ovarian or pancreatic cancer, or malignant
CC glioma in a subject (preferably human, more preferably African or Asian)
CC or a mouse. The present sequence is used in the exemplification of the
CC invention.
XX
SQ Sequence 17 BP; 4 A; 3 C; 4 G; 5 T; 0 U; 1 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 6.7e+02;
Matches 14; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Oy 52 GCAGTGTGACTGCTGA 67
|||:||||:|||||
Db 2 GCAATGTACTGCTGA 17

RESULT 895
ADB92461
ID ADB92461 standard; DNA; 17 BP.
AC ADB92461;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human MDRI variant allele sequence fragment SEQ ID NO:356.
XX
KW irinotecan; colorectal cancer; cervical cancer; gastric cancer;
KW lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW multidrug resistance 1; MDRI; cytosstatic; ds; human; UGT1A1; MRPI; TOP1.
XX
OS Homo sapiens.
XX
PN WO2003013535-A2.
XX
PD 20-FEB-2003.
XX
PF 23-JUL-2002; 2002WO-EP008220.
XX
PR 23-JUL-2001; 2001EP-00117608.
XX
PR 24-MAY-2002; 2002EP-00011710.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Heinrich G, Kerb R;
XX
DR WPI; 2003-342400/32.
XX
SQ New use of irinotecan for preparation of pharmaceutical compositions for
treating cancer in subject having genome with variant allele comprising
multidrug resistance 1 polynucleotide.
XX
PS Disclosure; Page 50; 104pp; English.
XX
CC The invention relates to a novel use of irinotecan or its derivative for
the preparation of a pharmaceutical composition for treating colorectal,
cervical, gastric, lung, ovarian or pancreatic cancer, or malignant
glioma in a subject having a genome with a variant allele which comprises
a multidrug resistance 1 (MDRI) polynucleotide. A composition of the
invention has cytostatic activity. The present sequence is used in the
exemplification of the invention.
XX
SQ Sequence 17 BP; 4 A; 3 C; 4 G; 5 T; 0 U; 1 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 6.7e+02;
Matches 14; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Oy 52 GCAGTGTGACTGCTGA 67
|||:||||:|||||
Db 2 GCAATGTACTGCTGA 17

RESULT 896
AAX71742
ID AAX71742 standard; RNA; 18 BP.
XX
AC AAX71742;
XX
DT 28-JUL-1999 (first entry)
XX

DE Human KDR VEGF receptor hairpin ribozyme substrate #40.
XX
KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW KDR; hamsterhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX
OS Homo sapiens.
XX
PN WO9715662-A2.
XX
PD 01-MAY-1997.
XX
PF 25-OCT-1996; 96WO-US017480.
XX
PR 26-OCT-1995; 95US-0005974P.
XX
PR 11-JAN-1996; 96US-00584040.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (CHIR) CHIRON CORP.
XX
PI Pavco P, Moswiggen J, Stinchcomb D, Escobedo J;
XX
DR WPI; 1997-259017/23.
XX
CC Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
stability - useful for treating e.g. tumour angiogenesis, psoriasis,
rheumatoid arthritis, etc., in a human patient.
XX
PS Claim 4; Page 120; 218pp; English.
XX
CC The present invention describes nucleic acid molecules which modulate the
synthesis, expression and/or stability of a mRNA encoding 1 or more
receptors of vascular endothelial growth factor (VEGF). A patient
(preferably human) having a condition associated with the level of the
fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
treated by administering the nucleic acid molecule or the expression
vector to the patient. AAX67275 to AAX75752 represent specific examples
of nucleic acid molecules from the present invention
XX
SQ Sequence 18 BP; 2 A; 9 C; 1 G; 0 T; 6 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 18;
Best Local Similarity 64.3%; Pred. No. 7.1e+02;
Matches 9; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Oy 1701 CTCTCTGCTTACCT 1714
|:|:|:|:|:|:
Db 2 CUCUCUGCCUCCU 15

RESULT 897
AAZ41054
ID AAZ41054 standard; DNA; 18 BP.
XX
AC AAZ41054;
XX
DT 26-JAN-2000 (first entry)
XX
DE Human ELK-1 phosphorothioate antisense oligonucleotide SEQ ID NO:206.
XX
KW Identification; genetic target; gene modulation; human; probe;
KW antisense oligonucleotide; phosphorothioate; PCR primer;
KW nucleotide sequence-based technology; antisense drug discovery;
KW target validation; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9953101-A1.


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XX PD 21-OCT-1999.
XX PF 13-APR-1999; 99WO-US008268.
XX PR 13-APR-1998; 98US-0081483P.
XX PR 28-APR-1998; 98US-00067638.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Cowsert LM, Baker BF, Mcneil J, Freier SM, Sasnor HM, Brooks DG;
XX PI Ohasi C, Wyatt JR, Borchers AH, Vickers TA;
XX XX WPI; 1999-620446/53.
XX DR
XX PT Identifying compounds which modulate expression of nucleic acids, used to
XX PT provide compounds having defined physical, chemical or bioactive
XX PT properties, e.g. antisense activity.
XX XX Example 24; Page 104; 264pp; English.
XX CC A method has been developed of defining a set of compounds that modulate
XX CC the expression of a target nucleic acid (tNA) sequence via binding of the
XX CC compounds with the tNA sequence. The method comprises generating a
XX CC library of virtual compounds in silico according to defined criteria, and
XX CC evaluating in silico the binding of the virtual compounds with the tNA
XX CC according to defined criteria. Also described are: (1) a method of
XX CC defining a set of oligonucleotides (ONS) that modulate the expression of
XX CC a tNA sequence via binding of the ONS with the tNA sequence comprising
XX CC generating a library of virtual compounds in silico according to defined
XX CC criteria, and evaluating in silico the binding of the virtual ONS with
XX CC the tNA according to defined criteria; and (2) a method of defining a set
XX CC of compounds that modulate the expression of a tNA sequence via binding
XX CC of the compounds with the tNA. The methods can be used for the generation
XX CC and identification of synthetic compounds having defined physical,
XX CC chemical or bioactive properties. Information gathered from assays of
XX CC such compounds is used to identify nucleic acid sequences that are
XX CC tractable to a variety of nucleotide sequence-based technologies, e.g.
XX CC antisense drug discovery and target validation. AAZ40852 to AA441220, and
XX CC RAY52701 to RAY52706, represent sequences used in the exemplification of
XX CC the present invention
XX SQ Sequence 18 BP; 0 A; 2 C; 12 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.1e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 232 GGTGGTGGTGGCGG 245
Db 1 GGTGGTGGTGGCGG 14

RESULT 898
AAZ06571
ID AAZ06571 standard; DNA; 18 BP.
XX AC AAZ06571;
XX XX
XX DT 23-NOV-1999 (first entry)
XX DE ELK-1 expression modulator #9.
XX KW Human ELK-1; p62TCF; Ets domain transcription factor protein; apoptosis;
XX KW expression inhibition; infection; inflammation; tumour formation;
XX KW diagnosis; phosphorothioate; antisense compound; ss.
XX XX Synthetic.
XX OS
XX FH Key Location/Qualifiers
XX FT modified_base 1. .18
XX FT /tag= a
XX FT /note= "Internucleoside phosphorothioate linkages"

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FT modified_base 1. .4
FT /tag= b
FT /note= "Optionally 2-methoxyethyl (2'-MOE) nucleosides
FT except cytosine residues which are 5-methylcytosine"
FT 15. .18
FT modified_base
FT /tag= c
FT /note= "Optionally 2-methoxyethyl (2'-MOE) nucleosides
FT except cytosine residues which are 5-methylcytosine"
XX PN US5948680-A.
XX XX
XX PD 07-SEP-1999.
XX XX
XX PF 17-DEC-1998; 98US-00213767.
XX PR 17-DEC-1998; 98US-00213767.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Baker BF, Cowsert LM;
XX XX WPI; 1999-517959/43.
XX DR
XX XX Antisense compound useful for diagnosis, treatment and prevention of
XX PT disease associated with ELK-1 expression.
XX PS Claim 3; Col 38; 31pp; English.
XX CC Sequences AAZ06571-206607 are antisense polynucleotides targeted to a
XX CC nucleic acid molecule encoding human ELK-1 (also known as p62TCF). ELK-1
XX CC is a member of the ternary complex factor subfamily of Ets-domain
XX CC transcription factor proteins. The polynucleotides inhibit the expression
XX CC of human ELK-1, and this sequence targets the 5' untranslated region of
XX CC the ELK-1 RNA. Sequences AAZ06571-206607 all cause at least 30%
XX CC inhibition of ELK-1 expression. The antisense sequences can be used to
XX CC inhibit the expression of human ELK-1 in human cells or tissues in vitro.
XX CC ELK-1 uses a bipartite recognition mechanism mediated by both protein-DNA
XX CC and protein-protein interactions to regulate genes by direct and indirect
XX CC DNA binding and has been shown to control various signal transduction
XX CC pathways and other cell functions including apoptosis. This means that
XX CC antisense compounds inhibiting expression of ELK-1 can be used to treat
XX CC diseases associated with its expression in animals, particularly humans
XX CC and to prevent or delay infection, inflammation or tumour formation. The
XX CC compounds can also be used for diagnosis, as research reagents and in
XX CC kits
XX XX Sequence 18 BP; 0 A; 2 C; 12 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.1e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 232 GGTGGTGGTGGCGG 245
Db 1 GGTGGTGGTGGCGG 14

RESULT 899
ABA99961
ID ABA99961 standard; DNA; 18 BP.
XX AC ABA99961;
XX XX
XX DT 05-JUL-2002 (first entry)
XX DE Human ELK-1 PCR primer #2.
XX KW Human; cytosine methylation; 5'-CpG-3'; uracil; cytosine; diagnosis;
XX KW drug; side effect; cancer; central nervous system; cardiovascular;
XX KW gastrointestinal; respiratory system; single nucleotide polymorphism;
XX KW SNP; cell differentiation; ELK-1; PCR; primer; ss.
XX XX Homo sapiens.
XX OS

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XX PN WO200218632-A2.
XX PD 07-MAR-2002.
XX PF 01-SEP-2001; 2001WO-EP010074.
XX PR 01-SEP-2000; 2000DE-01043826.
XX PS 05-SEP-2000; 2000DE-01044543.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K, Guetig D;
XX DR WPI; 2002-371829/40.
XX PT
XX PT Determining the degree of cytosine methylation in genomic DNA, useful for
XX PT diagnosis and prognosis, comprises selective hybridization of amplicons
XX PT from chemically treated DNA.
XX PS Example 1; Page 33; 56pp; German.
XX CC This invention describes a novel method for determining the degree of
XX CC methylation of a particular cytosine in a motif 5'-CpG-3', present in a
XX CC genomic sample of DNA. The sample is treated chemically to convert
XX CC cytosine (C) but not methylated C, to uracil, then part of the genomic
XX CC DNA that contains the target C is amplified to form a labeled amplicon.
XX CC The amplicon is hybridised to two classes, each with at least one member,
XX CC of oligonucleotides and/or peptide-nucleic acid (PNA) oligomers and the
XX CC degree of hybridisation to both classes is determined from the label on
XX CC the amplicon. From the ratio of labels hybridised to the two classes of
XX CC oligomers, the degree of methylation is calculated. The method is used:
XX CC (i) for diagnosis and/or prognosis of side effects of therapeutic drugs
XX CC and of a wide range of diseases, e.g. cancer, disorders of the central
XX CC nervous, cardiovascular, gastrointestinal and respiratory systems etc.,
XX CC particularly by detecting mutations or single nucleotide polymorphisms
XX CC (SNP's); and (ii) for differentiation of cell or tissue types and for
XX CC investigating cell differentiation. The method allows the methylation
XX CC status of many C residues to be determined simultaneously. This sequence
XX CC represents a PCR primer used in the amplification of the human ELK-1 gene
XX CC used in the method of the invention
XX SQ Sequence 18 BP; 1 A; 1 C; 12 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.1e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 232 GGTGGTGGTGGCGG 245
DB 2 GGTGGTGGTGGCGG 15
|||||
RESULT 900
AAF88946
ID AAF88946 standard; DNA; 18 BP.
XX AC
XX AC AAF88946;
XX XX
XX DT 20-JAN-2003 (first entry)
XX DE Human ELK-1 PCR primer SEQ ID 2.
XX KW Human; cytosine methylation; methylation status; CpG; infection; cancer;
XX KW diagnosis; side-effect; cardiovascular disease; gastrointestinal disease;
XX KW inflammation; cell differentiation; ELK-1; PCR; primer; ss.
XX OS Homo sapiens.
XX PN WO200272880-A2.
XX PD 19-SEP-2002.
XX PF
XX PR
XX PS
XX PA

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PF 08-MAR-2002; 2002WO-EP002572.
XX XX
XX PR 09-MAR-2001; 2001DE-01012515.
XX PR 19-NOV-2001; 2001DE-01058283.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Berlin K;
XX XX
XX DR WPI; 2002-723373/78.
XX PT
XX PT Detecting methylation status of test DNA in a mixture, useful for
XX PT diagnosis and prognosis of disease, comprises bisulfite treatment then
XX PT selective amplification of test DNA.
XX PS Example 4; Page 43; 82pp; German.
XX CC This invention describes a novel method for detecting cytosine
XX CC methylation in DNA samples by: (i) chemically treating a genomic sample
XX CC to convert all non-methylated cytosines to uracil while leaving
XX CC methylated cytosines unchanged; (ii) amplification with 2 primer
XX CC oligonucleotides and a polymerase; and (iii) analysis of the amplicon and
XX CC deducing the methylation status of test DNA. The method is used for
XX CC determining the methylation status at different CpG positions, which is
XX CC used for diagnosis and/or prognosis of a very wide range of disorders,
XX CC e.g. side-effects of pharmaceuticals, cancer, cardiovascular or
XX CC gastrointestinal diseases, infections, inflammation, etc. The method is
XX CC also useful for differentiating between cell and tissue types and for
XX CC investigating cell differentiation. The method: (i) provides a
XX CC quantitative indication of the different methylated positions, and thus a
XX CC very accurate classification; and (ii) eliminates interference from
XX CC background DNA, making it suitable for analysis of serum or body fluids
XX CC (which contain background DNA in large excess). This sequence represents
XX CC a PCR primer used to amplify the human ELK-1 gene, described in the
XX CC disclosure of the invention
XX SQ Sequence 18 BP; 1 A; 1 C; 12 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.1e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 232 GGTGGTGGTGGCGG 245
DB 2 GGTGGTGGTGGCGG 15
|||||
RESULT 901
ADC70281
ID ADC70281 standard; DNA; 18 BP.
XX AC
XX AC ADC70281;
XX XX
XX DT 19-DEC-2003 (first entry)
XX DE Primer oligo used for analysing CpG islands in genomic DNA (SeqID 771).
XX KW PCR; primer; ss; lung cell proliferative disorder; CpG dinucleotide;
XX KW adenocarcinoma; squamous cell carcinoma; cytostatic; probe; PNA-oligomer;
XX KW cytosine methylation state.
XX OS Unidentified.
XX PN WO2003052135-A2.
XX PD 26-JUN-2003.
XX PF 10-DEC-2002; 2002WO-EP014026.
XX PR 14-DEC-2001; 2001DE-01061625.
XX PA (EPIG-) EPIGENOMICS AG.
XX XX

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PI Burger M, Field JK, Genc B, Liloglou T, Lipscher E, Maier S;
XX Nimmrich I;
DR WPI; 2003-533029/50.
XX
XX Detecting and differentiating cytosine methylation state of genomic DNA,
PT useful for diagnosing, treating prognosticating and/or monitoring lung
PT cell proliferative disorders e.g. adenocarcinoma and squamous cell
PT carcinoma.
XX
XX Claim 15; SEQ ID NO 771; 58pp; English.
XX
XX This invention relates to a novel method for detecting and
CC differentiating between lung cell proliferative disorders associated with
CC at least one gene and/or their regulatory regions. Specifically, it
CC refers to a method comprising contacting a target nucleic acid in a
CC biological sample with at least one reagent, wherein the reagent is able
CC to distinguish between methylated and non-methylated CpG dinucleotides
CC present in the target DNA. As such, it is possible to further
CC differentiate and diagnose medical conditions including adenocarcinoma
CC and squamous cell carcinoma, and their respective adjacent lung tissue.
CC The present invention describes cytosine oligomers and PNA-oligomers
CC that are useful as probes for determining the cytosine methylation state
CC or single nucleotide polymorphisms (SNPs) of the target sequence. This
CC oligonucleotide sequence is a primer oligomer used for the analysis of
CC CpG positions within genomic DNA, used in an exemplification of the
CC invention.
XX
XX SQ Sequence 18 BP; 3 A; 0 C; 10 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 14; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.1e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1156 ATGTGGGGTGTGGG 1169
Db 1 ATGTGGGGTGTGGG 14
RESULT 902
AAZ43839
ID AAZ43839 standard; DNA; 19 BP.
XX
XX AC AAZ43839;
XX
XX 10-MAR-2000 (first entry)
XX
XX Human adult thymus cDNA clone vhl_1 DNA probe.
XX
XX Human; secreted protein; treatment; nutritional activity; cytokine;
KW cell proliferation; cell differentiation; hematopoiesis regulation;
KW tissue growth; activin; inhibin; chemotactic; chemokinetic; hemostatic;
KW thrombolytic; anti-inflammatory; invasion suppressor; tumor inhibition;
KW gene therapy; ss.
XX
XX Synthetic.
OS Homo sapiens.
XX
XX WO9955721-A1.
XX
XX 04-NOV-1999.
XX
XX 23-APR-1999; 99WO-US008504.
XX
XX 24-APR-1998; 98US-0082904P.
XX 11-JUN-1998; 98US-0088994P.
XX 12-JUN-1998; 98US-0089278P.
XX 02-JUL-1998; 98US-0091647P.
XX 24-AUG-1998; 98US-0097639P.
XX 22-APR-1999; 99US-00097639.
XX
XX (ALPH-) ALPHAGENE INC.
XX

PI Valenzuela D, Yuan O, Hoffman H, Hall J, Rapiejko P;
XX WPI; 2000-052801/04.
XX
XX New polynucleotides encoding secreted human proteins, derived from human
PT fetal brain, adult skin, adult brain, adult heart, adult thymus and adult
PT aorta cDNA libraries.
XX
XX Disclosure; Page 270; 282pp; English.
XX
XX This invention describes novel human secreted proteins which are encoded
CC by polynucleotides obtained from fetal brain, adult skin, adult brain,
CC adult heart, adult thymus and adult aorta cDNA libraries. The
CC polynucleotides and proteins are predicted to have biological activities
CC which would make them suitable for treating, preventing or ameliorating
CC medical conditions in humans and animals, although no supporting data is
CC given. Suggested activities include nutritional activity, cytokine and
CC cell proliferation/differentiation activity, immune stimulating (e.g. as
CC vaccines) or suppressing activity, hematopoiesis regulating activity,
CC tissue growth activity, activin/inhibin activity,
CC chemotactic/chemokinetic activity, hemostatic and thrombolytic activity,
CC receptor/ligand activity, anti-inflammatory activity, cadherin/tumor
CC invasion suppressor activity, and tumor inhibition activity. The
CC polynucleotides are also stated to be useful for gene therapy. AAZ43809-
CC Z43840 represent DNA probes used to isolate the polynucleotides
CC represented in AAZ43777-243808 which encode the secreted proteins
CC represented in AAZ50905-Y50947
XX
XX SQ Sequence 19 BP; 6 A; 1 C; 10 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 14; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.5e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 34 AGGTAGGCAGGAGG 47
Db 1 AGGTAGGCAGGAGG 14
RESULT 903
AAZ82617
ID AAZ82617 standard; DNA; 19 BP.
XX
XX AC AAZ82617;
XX
XX 04-DEC-2000 (first entry)
XX
XX cdk2 ribozyme binding site #54.
XX
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
KW Mammalia.
OS
XX WO200032765-A2.
XX
XX 08-JUN-2000.
XX
XX 06-DEC-1999; 99WO-US028772.
XX
XX 04-DEC-1998; 98US-0110954P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Tritz R, Welch PJ, Barber JR, Robbins JM;
XX
XX WPI; 2000-412314/35.
XX
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.
XX
XX Disclosure; Page 49; 109pp; English.
XX

CC The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AA82415 to AA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX Sequence 19 BP; 2 A; 6 C; 4 G; 7 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 14; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.5e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 922 CTGTTCCAGCTGCT 935
DB 6 CTGTTCCAGCTGCT 19
RESULT 904
AAH57779
ID AAH57779 standard; DNA; 19 BP.
XX
AC AAH57779;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:203.
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX recognition site; target; ribozyme binding site; eye disease; vulvular;
XX proliferative disease; skin disease; psoriasis; diabetic retinopathy;
XX cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
XX matrix metalloproteinase; growth factor; reductase; scarring; cycostatic;
XX antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;
XX antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
XX atopic dermatitis; actinic keratosis; squamous cell carcinoma;
XX basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
XX sickle cell retinopathy; ss.
XX
XX Homo sapiens.
OS Synthetic.
OS
XX
XX WO200130362-A2.
XX
XX 03-MAY-2001.
XX
XX 26-OCT-2000; 2000WO-US029500.
XX
XX 26-OCT-1999; 99US-0161532P.
XX (IMMU-) IMMUSOL INC.
XX
XX Robbins JM, Tritz R;
XX WPI; 2001-300427/31.
XX
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
XX that cleave RNA encoding cytokines involved in inflammation, matrix
XX metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
XX Example 1; Page 86; 408pp; English.
XX
XX The present invention describes a method for treating a proliferative
XX skin or eye disease and scarring. The method involves administering a
XX ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX dependent kinase, growth factor or a reductase, or administering a
XX nucleic acid molecule (II) comprising a promoter operably linked to a
XX nucleic acid segment encoding (I). (I) can have antiproliferative,
XX dermatological, cycostatic, antiseborrheic, antidiabetic, antisickling,
XX ophthalmological, vulvular, keratolytic and virucide activities, and

CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
XX Sequence 19 BP; 2 A; 6 C; 4 G; 7 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 14; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.5e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 922 CTGTTCCAGCTGCT 935
DB 6 CTGTTCCAGCTGCT 19
RESULT 905
AAH80149/c
ID AAH80149 standard; DNA; 20 BP.
XX
AC AAH80149;
XX
DT 17-AUG-1999 (first entry)
XX
DE Clostridium histolyticum collagenase PCR primer #1.
XX Clostridium histolyticum; collagenase; enzymatically active; cleavage;
XX fusion protein; PCR primer; ss.
XX
XX Synthetic.
OS Clostridium histolyticum.
XX JP11137256-A.
XX 25-MAY-1999.
XX
XX 12-NOV-1997; 97JP-00310887.
XX
XX 12-NOV-1997; 97JP-00310887.
XX (SEK) SEIKAGAKU KOGYO CO LTD.
XX WPI; 1999-374377/32.
XX
XX New enzymatically active polypeptide and kit containing it - useful for
XX cleaving fusion proteins.
XX
XX Example 1; Page 15; 16pp; Japanese.
XX
XX The present invention describes an enzymatically active polypeptide (I)
XX derived from a Clostridium histolyticum collagenase with its collagen-
XX combining region deleted which specifically recognizes a peptide with the
XX sequence PLGP, and which cleaves the peptide by hydrolysing the peptide
XX bond on C-terminal side of the leucine residue of this sequence and which
XX does not decompose water-insoluble type I collagen. The present sequence
XX represents a PCR primer used in an example from the present invention
XX
XX Sequence 20 BP; 3 A; 3 C; 6 G; 8 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 14; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1527 TCAGCTACAAAAGG 1540
DB 17 TCAGCTACAAAAGG 4

RESULT 906
AAI99916/c
ID AAI99916 standard; DNA; 20 BP.
XX
AC AAI99916;
XX
DT 18-FEB-2002 (first entry)
XX
DE Human alpha-2BAR genotyping PCR primer SEQ ID NO 22.
XX
KW Human; genotyping; alpha-2B; alpha-2A; alpha-2C; adrenergic receptor;
KW polymorphic site; allelic variant; cardiovascular disease;
KW central nervous system disease; adenylyl cyclase; MAP kinase activity;
KW phosphorylation; inositol phosphate; alpha-2BAR; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN W0200179561-A2.
XX
PD 25-OCT-2001.
XX
PF 17-APR-2001; 2001WO-US012575.
XX
PR 17-APR-2000; 2000US-00551744.
PR 10-AUG-2000; 2000US-00636259.
PR 19-OCT-2000; 2000US-00692077.
XX
PA (LIGG/) LIGGETT S B.
PA (SMAL/) SMALL K M.
XX
PI Liggett SB, Small KM;
XX
DR WPI; 2001-611728/70.
XX
Genotyping an alpha-2B, 2A, or 2C adrenergic receptor gene useful for
determining whether an individual is at increased risk of developing a
disease associated with the corresponding receptor comprises detecting a
polymorphic site.
XX
Claim 10; Page 112; 163pp; English.
XX
The invention relates to genotyping an alpha-2B, 2A, or 2C adrenergic
receptor gene (I)-(III) by detecting a polymorphic site, comprising: (a)
obtaining a sample having a polynucleotide encoding an alpha-2B, alpha2A
or alpha2C or fragment or complement of; and (b) detecting a polymorphic
site comprising nucleotide positions 901-909 of (I), a site comprising
cytosine or guanine at position 753 of (II) or a site comprising (A)
(GGGGCGGGGCG) or (B) (GGGGCGGCTGG) at positions 961-972 of (III). The
method may be used for genotyping an alpha2B, alpha2A or alpha2C receptor
gene and further used to determine whether an individual is at increased
risk of developing a disease associated with alpha2B, alpha2A or alpha2,
comprising detecting a polymorphic site which correlate to disease
selected from cardiovascular disease, central nervous system disease and
combinations of these. In addition, the technique may be used to predict
an individual's response to an alpha2B, alpha2A, or alpha2C agonist (e.g.
epinephrine, norepinephrine, clonidine, oxymetazoline, guanabenz,
UK14304, BHT933 and combinations of these) or antagonist (e.g. yohimbine,
prazosin, A2C 239, rauvolfine, idazoxan, tolazoline, phentolamine and
combinations of these) by detecting the polymorphic site and correlating
the site to a predetermined response (where the response is correlated to
adenylyl cyclase, MAP kinase activity, phosphorylation or inositol
phosphate levels). The present sequence is that of a human alpha-2BAR PCR
primer, useful for the genotyping methods of the invention
XX
Sequence 20 BP; 6 A; 3 C; 7 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 14; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1252 ATCTTAGGACCCC 1265
|||||||

Db 17 ATCTTAGGACCCC 4
RESULT 907
AAC88715
ID AAC88715 standard; DNA; 20 BP.
XX
AC AAC88715;
XX
DT 07-MAR-2001 (first entry)
XX
DE Human catenin-binding zinc finger protein PCR primer FVR463F.
XX
KW Catenin-binding zinc finger protein; cancer; neurological disorder;
KW drug screening; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN EP1054059-A1.
XX
PD 22-NOV-2000.
XX
PF 17-MAY-1999; 99EP-00201543.
XX
PR 17-MAY-1999; 99EP-00201543.
XX
PA (VLA-) VLAAMS INTERUNIVERSITAIR INST BIOTECHNOG.
XX
PI Van Roy F, Vanlandschoot A, Janssens B;
XX
DR WPI; 2001-033776/05.
XX
Nucleic acid or its fragments, useful for diagnosing and treating cancer
and neurological disorders, corresponds to a catenin-binding protein in
signal transduction and gene regulatory pathways.
XX
Disclosure; Page 17; 71pp; English.
XX
The present invention is related to the coding sequence and protein
fragments of a human catenin-binding zinc finger protein. The coding
sequence was isolated from a human kidney cDNA library, but is expressed
in most human tissue. The sequences provided by the invention can be used
in the diagnosis and treatment of cancer and neurological disorders, and
in drug screening to identify compounds capable of the same
XX
Sequence 20 BP; 5 A; 2 C; 8 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 14; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 877 GATGACTGTGGGAA 890
|||||||
Db 2 GATGACTGTGGGAA 15
RESULT 908
AAC88704
ID AAC88704 standard; DNA; 20 BP.
XX
AC AAC88704;
XX
DT 07-MAR-2001 (first entry)
XX
DE Human catenin-binding zinc finger protein PCR primer FVR293F.
XX
KW Catenin-binding zinc finger protein; cancer; neurological disorder;
KW drug screening; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN EP1054059-A1.
XX

Query Match 0.8%; Score 14; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 877 GATGACTGTGGAA 890
| | | | | | | | | | | | | | | |
DB 5 GATGACTGTGGAA 18

RESULT 911
ABZ93277/c
ID ABZ93277 standard; DNA; 20 BP.
XX
AC ABZ93277;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
XX WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shanabuddin S;
XX
DR WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 8519; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 6 A; 8 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1087 GTGCTGACACTGTG 1100
| | | | | | | | | | | | | | | |
DB 14 GTGCTGACACTGTG 1

RESULT 912
ABZ22802/c
ID ABZ22802 standard; DNA; 20 BP.
XX
AC ABZ22802;
XX
DT 02-APR-2003 (first entry)
XX
DE Human heparanase phosphorothioate oligonucleotide SEQ ID NO:3.
XX
KW Human; heparanase; phosphorothioate; antisense oligonucleotide;
KW cytostatic; gene therapy; tumour; ss.
XX
OS Homo sapiens.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= a
XX /mod_base= OTHER
XX /note= "phosphorothioate linkages"
XX
XX WO2003004705-A1.
XX
PD 16-JAN-2003.
XX
XX 01-JUL-2002; 2002WO-US020636.
XX
PR 05-JUL-2001; 2001US-00899440.
XX
PA (UYCO) UNIV COLUMBIA NEW YORK.
XX
XX Stein C;
XX
DR WPI; 2003-201558/19.
XX
XX New oligonucleotide having a sequence complementary to a sequence of
PT ribonucleic acid encoding a heparanase, useful for preparing a
PT composition for treating tumor.
XX
PS Claim 7; Page 32; 48pp; English.
XX
CC The present invention describes an oligonucleotide having a sequence
CC complementary to a sequence of ribonucleic acid encoding a heparanase.
CC The oligonucleotide hybridises with the ribonucleic acid under conditions
CC of high stringency and has a sequence comprising 10-40 bp. The
CC internucleoside linkages of the oligonucleotide comprise at least one
CC phosphorothioate linkage. Hybridisation of the oligonucleotide to the
CC ribonucleic acid inhibits expression of the heparanase, where inhibition
CC of heparanase means at least a 50% reduction in the quality of
CC heparanase. Also described: (1) a method of inhibiting expression of a
CC heparanase in a cell; (2) a composition comprising the above
CC oligonucleotide in an amount effective to inhibit the expression of
CC heparanase in the cell and a carrier; and (3) a method of treating a
CC tumour in a subject comprises administering to the subject an amount of
CC the above oligonucleotide effective to inhibit expression of a heparanase
CC in the subject. Heparanase antisense oligonucleotides have cytostatic
CC activity, can be used in gene therapy, and can be used for preparing a
CC composition for treating tumours. The present sequence represents a human
CC heparanase phosphorothioate antisense oligonucleotide, which is used in
CC the exemplification of the present invention
XX
SQ Sequence 20 BP; 6 A; 8 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 273 TGTGCTCTCTGGG 286
DB 14 TGTGCTCTCTGGG 1

RESULT 913
ACC86848/c
ID ACC86848 standard; DNA; 20 BP.
XX
AC ACC86848;
XX
DT 04-AUG-2003 (first entry)
XX
DE Mouse VEGFR-1 chimeric phosphorothioate oligonucleotide SEQ ID NO:143.
XX
KW Vascular endothelial growth factor receptor 1; VEGF receptor; VEGFR;
KW inhibitor; cytostatic; antirheumatic; antiarthritic; antiangiogenic;
KW antiinflammatory; antisense gene therapy; hyperproliferative disorder;
KW cancer; rheumatoid arthritis; angiogenesis; infection; inflammation;
KW tumour formation; phosphorothioate; 2'-O-methoxyethyl; 2'-MOE; ss.
XX
OS Mus musculus.
OS Synthetic.
XX
PH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-O-methoxyethyl (2'-MOE) wings at the 5',
FT and 3' ends, which are 5 nucleotides in length. Also all
FT cytidine residues are 5-methylcytidines"
XX
FN WO2003022227-A2.
XX
XX 20-MAR-2003.
XX
XX 12-SEP-2002; 2002WO-US029148.
XX
XX 13-SEP-2001; 2001US-00953318.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Watt AT;
XX
XX WPI; 2003-301004/29.
XX
XX New antisense oligonucleotide targeted to a nucleic acid encoding
XX vascular endothelial growth factor receptor-1, useful for diagnosing or
XX treating cancer, rheumatoid arthritis, or diseases or conditions
XX involving angiogenesis.
XX
XX Claim 3; Page 86; 150pp; English.

CC The present invention describes a compound (C) 8-50 nucleobases in length
CC targeted to a nucleic acid molecule encoding vascular endothelial growth
CC factor receptor-1 (VEGFR-1), where the compound inhibits the expression
CC of VEGFR-1 and specifically hybridises with the nucleic acid encoding
CC VEGFR-1 or with an 8-nucleobase portion of an active site on the nucleic
CC acid molecule encoding VEGFR-1. Also described: (1) a composition
CC comprising (C) and a carrier or diluent; (2) inhibiting the expression of
CC VEGFR-1 in cells or tissues by contacting the cells or tissues with (C)
CC so that the expression of VEGFR-1 is inhibited; and (3) treating an
CC animal having a disease or condition associated with VEGFR-1 by
CC administering (C) to the animal so that the expression of VEGFR-1 is
CC inhibited. (C) has antiangiogenic, antirheumatic, antiarthritic,
CC cytostatic and antiinflammatory activities, and can be used in antisense
CC gene therapy. The antisense compounds are useful for modulating the

CC expression of VEGFR-1 and for treating diseases or conditions associated
CC with the expression of VEGFR-1, such as hyperproliferative disorders
CC (e.g. cancer), rheumatoid arthritis, or diseases or conditions involving
CC angiogenesis. The antisense compounds are also useful for diagnostics,
CC therapeutics, prophylaxis, e.g. to prevent or delay infection,
CC inflammation or tumour formation, as research reagents and kits, and in
CC distinguishing between functions of various members of a biological
CC pathway. The present sequence represents a mouse VEGFR-2 chimeric
CC phosphorothioate antisense oligonucleotide, which is used in an example
CC from the present invention
XX
XX Sequence 20 BP; 7 A; 3 C; 5 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 539 CCATCTTTGACAAAG 552
DB 18 CCATCTTTGACAAAG 5

RESULT 914
AAX09162
ID AAX09162 standard; DNA; 21 BP.
XX
AC AAX09162;
XX
DT 24-MAR-1999 (first entry)
XX
DE Human biallelic polymorphic marker upstream primer #42.
XX
KW Polymorphism; biallelic; human; forensic; paternity testing; disease;
KW detection; phenotypic typing; characteristic; infection; hereditary;
KW autoimmune disease; cancer; inflammation; drug; therapy; medication;
KW treatment; marker; primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
XX WO9820165-A2.
XX
XX 14-MAY-1998.
XX
XX 05-NOV-1997; 97WO-US020313.
XX
XX 06-NOV-1996; 96US-0030455P.
XX
XX (WHEED) WHITEHEAD INST BIOMEDICAL RES.
XX
XX Lander ES, Wang D, Hudson T;
XX
XX WPI; 1998-286974/25.
XX
XX New isolated nucleic acid segments from the human genome - used for
XX determining polymorphic forms for use in e.g. forensics, paternity
XX testing or phenotypic typing for disease.
XX
XX Claim 15; Page 51; 310pp; English.

CC AAX09121-X10268 are allele-specific oligonucleotide primers used in the
CC isolation of various biallelic polymorphic markers found in the human
CC genome (represented in AAX10269-X12937). These primers can be used in a
CC method for determining polymorphic forms in an individual for use in e.g.
CC forensics, paternity testing or for phenotypic typing for diseases such
CC as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
CC dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial
CC hypercholesterolemia, polycystic kidney disease, hereditary
CC spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary
CC haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos
CC syndrome, osteogenesis imperfecta, acute intermittent porphyria,
CC autoimmune diseases, inflammation, cancer, diseases of the nervous
CC system, infection by pathogenic microorganisms, and characteristics such

as longevity, appearance (e.g. baldness, obesity), strength, speed, endurance, fertility, and susceptibility or receptivity to particular drugs or therapeutic treatments. The isolated polymorphic nucleic acid segments can also be used to produce medicaments for the treatment or prophylaxis of such diseases

Sequence 21 BP; 7 A; 4 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 8.3e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 714 ACTGGAACATGAAG 727
4 ACTGGAACATGAAG 17

Db

RESULT 915
AAV08201
ID AAV08201 standard; DNA; 21 BP.
XX
AC AAV08201;
XX
XX 27-JAN-1999 (first entry)
XX
DE PCR primer ABCR.EXON7:F for ABCR coding sequence.
XX
XX ATP binding cassette; ABC transporter; ABCR; Stargardt Disease; therapy;
XX Fundus Flavimaculatus; age-related macular degeneration; diagnosis;
KW PCR primer; ss.
XX
XX Synthetic.
OS Homo sapiens.
XX
XX WO9837764-A1.
XX
XX 03-SEP-1998.
XX
XX 27-FEB-1998; 98WO-US003895.
XX
XX 27-FEB-1997; 97US-0039388P.
XX
XX (BAYU) BAYLOR COLLEGE MEDICINE.
PA (UYJC) UNIV JOHNS HOPKINS.
PA (USSH) US DEPT HEALTH & HUMAN SERVICES.
PA (UTAH) UNIV UTAH.
XX
XX Allikmets R, Anderson KL, Dean M, Leppart M, Lewis RA, Li Y;
PI Lupekki JR, Nathans J, Rattner A, Shroyer NF, Singh N, Smallwood PM;
PI Sun H;
XX
XX WPI; 1998-495375/42.
XX
XX Retina-specific ATP-binding cassette transporter and DNA - useful for,
PT e.g. diagnosis and treatment of macular degeneration, such as in
PT Stargardt Disease, Fundus Flavimaculatus and age-related degeneration.
XX
XX Claim 41; Page 27; 79pp; English.
XX
XX This sequence represents a PCR primer for DNA encoding the human retina
CC specific ATP binding cassette transporter (ABCR) of the invention. ABCR
CC may be used in compositions for screening agents that alters ABCR. The
CC agent can inhibit Stargardt Disease, Fundus Flavimaculatus and age-
CC related macular degeneration (MD). Primers (such as this sequence) and
CC probes for the ABCR DNA can be used in a diagnostic kit for detecting MD
XX
XX Sequence 21 BP; 8 A; 3 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 8.3e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 704 AGGAGATCAGACTG 717

|||||
8 AGGAGATCAGACTG 21

Db

RESULT 916
AAAX35653/C
ID AAX35653 standard; DNA; 21 BP.
XX
AC AAX35653;
XX
DT 09-JUL-1999 (first entry)
XX
DE PCR primer used to amplify human heparanase cDNA.
XX
XX Heparanase; hpa; modulator; heparin-binding growth factor;
KW cellular response; cytokine; cell interaction; plasma lipoprotein;
KW cellular susceptibility; infection; disintegration;
KW neurodegenerative plaque; wound healing; angiogenesis; restenosis;
KW atherosclerosis; inflammation; neurodegenerative disease; neutralise;
KW plasma heparin; micrometastasis; autoimmune lesion; renal failure;
KW PCR primer; ss.
XX
XX Synthetic.
XX
XX WO9511798-A1.
XX
XX 11-MAR-1999.
XX
XX 31-AUG-1998; 98WO-US017954.
XX
XX 02-SEP-1997; 97US-00922170.
PR 02-JUL-1998; 98US-00109386.
XX
XX (INSI-) INSIGHT STRATEGY & MARKETING LTD.
PA (HADA-) HADASIT MEDICAL RES SERVICES & DEV.
PA (FRIE/) FRIEDMAN M M.
XX
XX Pecker I, Vlodaysky I, Feinstein E;
XX
XX WPI; 1999-302255/25.
XX
XX New human polynucleotide useful for treating angiogenesis, restenosis,
PT and inflammation.
XX
XX Example 7; Page 30; 63pp; English.
XX
XX The specification describes a polypeptide having heparanase (hpa)
CC activity. The recombinant protein is used as a modulator of heparin-
CC binding growth factors, cellular responses to heparin-binding growth
CC factors and cytokines, cell interaction with plasma lipoproteins,
CC cellular susceptibility to viral, protozoal and bacterial infections or
CC disintegration of neurodegenerative plaques. Heparanase may be useful for
CC conditions such as wound healing, angiogenesis, restenosis,
CC atherosclerosis, inflammation, neurodegenerative diseases, and viral
CC infections. Mammalian heparanase can be used to neutralize plasma
CC heparin, and anti-heparanase antibodies may be applied for
CC immunodetection and diagnosis of micrometastases, autoimmune lesions, and
CC renal failure in biopsy specimens, plasma samples, and body fluids. The
CC present PCR primer was used to amplify hpa cDNA, in the course of the
CC invention
XX
XX Sequence 21 BP; 6 A; 8 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 8.3e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 273 TGCTGCTCTCTGGG 286
14 TGCTGCTCTCTGGG 1

Db

RESULT 917

AAA75055/c
ID AAA75055 standard; DNA; 21 BP.
XX
AC AAA75055;
XX
DT 15-JAN-2001 (first entry)
XX
XX PCR primer hpl-629 used to amplify human cDNA encoding heparanase.
XX
XX Human; heparanase; gene therapy; tumour; inflammation; autoimmunity;
KW heparin-binding growth factor; cytokine; neurodegenerative plaque;
KW wound healing; infection; burn; angiogenesis; restenosis;
KW atherosclerosis; inflammation; neurodegenerative disease;
KW Gerstmann-Straussler Syndrome; Creutzfeldt-Jakob disease; PCR primer; ss.
XX
OS Homo sapiens.
XX
XX WO200052178-A1.
XX
XX 08-SEP-2000.
XX
XX 14-FEB-2000; 2000WO-US003542.
XX
XX 01-MAR-1999; 99US-00258892.
XX
XX (INSI-) INSIGHT STRATEGY & MARKETING LTD.
PA (HADA-) HADASIT MEDICAL RES SERVICES & DEV.
PA (FRIE/) FRIEDMAN M M.
XX
XX Pecker I, Vlodavsky I, Feinstein E;
PI
XX WPI; 2000-579289/54.
XX
XX New polynucleotides encoding a polypeptide having heparanase activity,
PT useful in wound healing and in gene therapy, particularly in treating
PT tumor, inflammation, autoimmunity, neurodegenerative diseases.
XX
XX Example 6; Page 53; 152pp; English.
XX
XX The present PCR primer was used to amplify a human cDNA sequence, which
CC encoded a protein with heparanase catalytic activity. The heparanase
CC (hpa) polynucleotide is useful in gene therapy, particularly in treating
CC tumour, inflammation or autoimmunity. Particularly, the polynucleotide is
CC useful in modulating the bioavailability of heparin-binding growth
CC factors, cellular responses to heparin-binding growth factors (e.g. bFGF)
CC and cytokines (e.g. interleukin (IL)-8), cell interaction with plasma
CC lipoproteins, cellular susceptibility to certain viral and some bacterial
CC and protozoa infections, or disintegration of neurodegenerative plaques.
CC The polynucleotide is also useful in wound healing (e.g. thermal,
CC chemical or radiation burns), and in the treatment of angiogenesis,
CC restenosis, atherosclerosis, inflammation, neurodegenerative diseases
CC (Gerstmann-Straussler Syndrome or Creutzfeldt-Jakob disease), and some
CC viral, bacterial or protozoa infections
XX
XX Sequence 21 BP; 6 A; 8 C; 6 G; 1 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 8.3e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 273 TGGTCTCTCTGGGG 286
DB 14 TGGTCTCTCTGGGG 1
RESULT 918
AAH28645
ID AAH28645 standard; DNA; 21 BP.
XX
AC AAH28645;
XX
DT 17-JUL-2001 (first entry)
XX
XX

DE Human interleukin-13 coding sequence fragment PCR primer #20.
XX
KW Human; interleukin-13; IL13; single nucleotide polymorphism; SNP; cancer;
KW inflammation; immune disorder; cytokine; asthma; chromosome 5q31;
KW fibrosis; forensic; disease susceptibility; drug screening; PCR primer;
XX ss.
XX
OS Homo sapiens.
XX
XX WO200123410-A2.
XX
XX 05-APR-2001.
PD
XX 27-SEP-2000; 2000WO-US026556.
XX
XX 28-SEP-1999; 99US-0156489P.
XX
XX (GENA-) GENAISSANCE PHARM INC.
PA
XX Chew A, Denton RR, Nandabalan K, Stephens JC;
PI
XX WPI; 2001-343160/36.
XX
XX Novel polynucleotide comprising single nucleotide polymorphisms in human
PT interleukin-13 gene is useful for studying expression and function of
PT interleukin-13, as well as diagnosing and creating cancer, inflammatory,
PT and immune disorders.
XX
XX Example 1; Page 32; 85pp; English.
XX
XX The present invention provides the protein, cDNA and genomic sequences of
CC human interleukin-13 (IL13), and describes the single nucleotide
CC polymorphisms (SNPs) found within the gene, which is found on chromosome
CC 5q31. IL13 is a pro-inflammatory cytokine thought to be involved in the
CC pathogenesis of asthma and other immune and inflammatory diseases. The
CC IL13 sequences and the SNPs identified can be used in drug screening, to
CC determine an individual's susceptibility to disease, in forensic and
CC paternity testing, and to identify treatments for cancer, immune and
CC inflammatory diseases, including asthma and diseases characterised by
CC fibrosis. The present sequence is an IL13 fragment PCR primer
XX
XX Sequence 21 BP; 5 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 8.3e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 843 TGGTCTCTCTGGGACA 856
DB 5 TGGTCTCTCTGGGACA 18
RESULT 919
ABL53717
ID ABL53717 standard; DNA; 21 BP.
XX
AC ABL53717;
XX
DT 24-JUN-2002 (first entry)
XX
XX PGK1 PCR primer oVT201.
XX
XX Gene identification; cell proliferation; cancer; arteriosclerosis;
KW psoriasis; rheumatoid arthritis; restenosis; gene therapy; cytostatic;
KW antiarteriosclerotic; antipsoriatic; antiarthritic; antineumatic;
KW vasotropic; diagnosis; perturbation; PGK1; PCR; primer; ss.
XX
XX Saccharomyces cerevisiae.
OS
XX US2002019005-A1.
XX
XX 14-FEB-2002.
XX
XX

```

PF 02-AUG-2001; 2001US-00921101.
XX
XX 18-FEB-1999; 99US-00252204.
XX (ARCA-) ARCARIS INC.
XX
XX Kamb CA;
XX
XX WPI; 2002-328583/36.
XX
XX Identifying cell proliferation genes for treating diseases related to
XX unregulated proliferation, by selecting revertant cell lines, analyzing
XX their gene expression pattern and identifying differentially expressed
XX genes.
XX
XX Example 4; Page 30; 42pp; English.
XX
XX The present invention relates to selection systems for the identification
XX of cell proliferation genes based on functional analysis. A process is
XX provided for the identification of a cell proliferation promoting
XX activity, the isolation of genes involved in such activity, and the use
XX of these genes for the diagnosis or treatment of a disease associated
XX with excessive cell proliferation. The cell proliferation gene may be an
XX oncogene, a dominant transforming gene, a tumour suppressor gene or a
XX gene involved in the control of apoptosis. Antibodies, peptides and
XX nucleic acids can be designed to specifically interfere with the function
XX of the identified gene and/or its gene product for the treatment of
XX cancer, arteriosclerosis, psoriasis, rheumatoid arthritis and restenosis
XX (all claimed). In an embodiment of the invention, growth-proficient
XX revertants are induced using mutagenic agents termed perturbagens.
XX Revertant cells are selected, and the gene(s) that allow escape from
XX arrest are identified. The present sequence is that of PCR primer oVT201,
XX which is homologous to a region within the PGK1 3' untranslated region.
XX The primer was used in an example from the invention in which the
XX pheromone response pathway of Saccharomyces cerevisiae was used to
XX determine the general efficacy of a screen for perturbagen molecules
XX
XX Sequence 21 BP; 6 A; 1 C; 8 G; 6 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 14; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 8.3e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 8 AGCGTAAAGGATGG 21
Db 6 AGCGTAAAGGATGG 19
|||||
RESULT 920
ABS57693
ID ABS57693 standard; DNA; 21 BP.
XX
XX ABS57693;
XX
XX 27-FEB-2003 (first entry)
XX
XX S. cerevisiae PGK1 PCR primer oVT201.
XX
XX Cell proliferation; cellular target; viral growth; perturbagen; PCR;
XX primer; ss.
XX
XX Saccharomyces cerevisiae.
XX
XX US2002132229-A1.
XX
XX 19-SEP-2002.
XX
XX 14-AUG-2001; 2001US-00929663.
XX
XX 19-AUG-1996; 96US-00699266.
XX
XX 04-MAR-1997; 97US-00812994.
XX
XX 19-AUG-1997; 97WO-US014514.
XX
XX 06-NOV-1997; 97US-00965477.
XX

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PR 26-FEB-1999; 99US-00259155.
XX (ARCA-) ARCARIS INC.
XX
XX Kamb CA, Poritz MA;
XX
XX WPI; 2003-138536/13.
XX
XX Identifying cell proliferation gene involved in viral growth, comprises
XX identifying cell that continues to proliferate within virally infected
XX cells, and identifying corresponding cell proliferation gene in
XX identified cell.
XX
XX Example 4; Page 30; 43pp; English.
XX
XX This invention describes a novel method for identifying a cell
XX proliferation gene or a cellular target involved in viral growth within a
XX cell. The method comprises: (a) identifying within a number of virally
XX infected cells a cell that continues to proliferate; and (b) identifying
XX within the cell that continues to proliferate a corresponding cell
XX proliferation gene or cellular target. The invention also describes a
XX method for identifying a perturbagen that inhibits viral growth. The cell
XX proliferation gene identified by the above mentioned method is useful for
XX the diagnosis or treatment of a disease associated with aberrant or
XX unregulated cell proliferation, or for the development of antisense
XX approaches and ribozymes. As the method involves positive selection,
XX i.e., selection for growth, rather than cessation of growth, it is easier
XX to identify and separate growing cells from growth arrested cells than to
XX isolate non-transformed revertants. Since cultured tumour cell lines grow
XX vigorously in culture, the method can be performed in a time-efficient
XX manner, as growing colonies can be identified, isolated, and analysed
XX very quickly. Redundancy in growth control pathways is not a problem in
XX the growth suppressed tumour cell lines provided and used with the method
XX of the invention, as is the case in assays based on selection for non-
XX transformed cells. This sequence represents a PCR primer used with the
XX primer represented in ABS57694 which is capable of amplifying the yeast
XX (Saccharomyces cerevisiae) PGK1 3'UTR which is used in a construct to
XX identify perturbagens as described in the method of the invention
XX
XX Sequence 21 BP; 6 A; 1 C; 8 G; 6 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 14; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 8.3e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 8 AGCGTAAAGGATGG 21
Db 6 AGCGTAAAGGATGG 19
|||||
RESULT 921
ADD14266
ID ADD14266 standard; DNA; 21 BP.
XX
XX ADD14266;
XX
XX 01-JAN-2004 (first entry)
XX
XX Human src biomarker forward PCR primer SEQ ID NO:455.
XX
XX predictor set; protein tyrosine kinase activity modulator;
XX protein tyrosine kinase pathway; protein tyrosine kinase; cytostatic;
XX gene therapy; drug sensitivity; genetic profile; cancer; human;
XX PCR primer; ss.
XX
XX Synthetic.
XX
XX Homo sapiens.
XX
XX WO2003062395-A2.
XX
XX 31-JUL-2003.
XX
XX 17-JAN-2003; 2003WO-US001981.
XX

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XX 18-JAN-2002; 2002US-0350061P.
PR (BRIM) BRISTOL-MYERS SQUIBB CO.
XX Huang F, Fairchild CR, Lee FY, Shaw P;
XX WPI; 2003-636735/60.
XX
XX New polynucleotides and polypeptides for predicting the activity of
PT compounds that interact with protein tyrosine kinases and/or protein
PT tyrosine kinase pathways.
XX
XX Example 2; SEQ ID NO 455; 139bp; English.
XX
XX The present invention describes a predictor set comprising a plurality of
CC polynucleotides or polypeptides whose expression pattern is predictive of
CC the response of cells to treatment with a compound that modulates protein
CC tyrosine kinase activity or members of the protein tyrosine kinase
CC pathway. Also described: (1) predicting whether a compound is capable of
CC modulating the activity of cells, comprising obtaining a sample of cells,
CC determining whether the cells express a plurality of markers, and
CC correlating the expression of the markers to the compound's ability to
CC modulate the activity of the cells; (2) a plurality of cell lines for
CC identifying polynucleotides and polypeptides whose expression levels
CC correlate with compound sensitivity or resistance of cells associated
CC with a disease state; and (3) identifying polynucleotides and
CC polypeptides that predict compound sensitivity or resistance of cells
CC associated with a disease state, comprising subjecting the plurality of
CC cell lines to one or more compounds, analysing the expression pattern of
CC a microarray of polynucleotides or polypeptides, and selecting
CC polynucleotides or polypeptides that predict the sensitivity or
CC resistance of cells associated with a disease state by using the
CC expression pattern of the microarray. The polynucleotides and
CC polypeptides have cytostatic activities, and can be used in gene therapy.
CC The polynucleotides and polypeptides are useful in predicting the
CC activity of compounds that interact with protein tyrosine kinases and/or
CC protein tyrosine kinase pathways. These may be used in determining drug
CC sensitivity in patients to allow the development of individualized
CC genetic profiles which aid in treating diseases and disorders (e.g.
CC cancer) based on patient response at a molecular level. The present
CC sequence is used in the exemplification of the present invention.
XX
XX Sequence 21 BP; 6 A; 5 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 14; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 8.3e+02; Indels 0; Gaps 0;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 245 GCAGTGACCCCTGGA 258
Db |||||
7 GCAGTGACCCCTGGA 20
RESULT 922
AAT53444
ID AAT53444 standard; RNA; 17 BP.
XX AAT53444;
AC AAT53444;
XX
XX 25-MAR-2003 (revised)
DT 27-MAR-1997 (first entry)
XX
XX Rat ICAM hammerhead ribozyme target sequence (nt. position 510).
XX Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW intercellular adhesion molecule; rel A; tumour necrosis factor;
KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW translocation; chronic myelogenous leukaemia; CML; cancer;
KW Philadelphia chromosome; inflammation; autoimmune disease;
KW atherosclerosis; myocardial infarction; stroke; restenosis;
KW transplant rejection; rheumatoid arthritis; psoriasis;

KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW ss.
XX Rattus rattus.
OS
XX WO9523225-A2.
PN
XX
PD 31-AUG-1995.
XX
XX 23-FEB-1995; 95WO-1B000156.
PF
XX 23-FEB-1994; 94US-00201109.
PR 23-FEB-1994; 94US-00218934.
PR 04-APR-1994; 94US-00222795.
PR 07-APR-1994; 94US-00224483.
PR 15-APR-1994; 94US-00227958.
PR 18-APR-1994; 94US-00228041.
PR 18-MAY-1994; 94US-00245736.
PR 06-JUL-1994; 94US-00271280.
PR 15-AUG-1994; 94US-00291932.
PR 16-AUG-1994; 94US-00291433.
PR 17-AUG-1994; 94US-00292620.
PR 19-AUG-1994; 94US-00293520.
PR 02-SEP-1994; 94US-00300000.
PR 08-SEP-1994; 94US-00303039.
PR 23-SEP-1994; 94US-00311486.
PR 23-SEP-1994; 94US-00311749.
PR 28-SEP-1994; 94US-00314397.
PR 03-OCT-1994; 94US-00316771.
PR 07-OCT-1994; 94US-00319492.
PR 11-OCT-1994; 94US-00321993.
PR 04-NOV-1994; 94US-00334847.
PR 10-NOV-1994; 94US-00337608.
PR 28-NOV-1994; 94US-00345516.
PR 16-DEC-1994; 94US-00357577.
PR 23-DEC-1994; 94US-00363233.
PR 30-JAN-1995; 95US-00380734.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Stinchcomb DT, Chowira B, Direnzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Meawissen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Usman N, Wincott FE, Woolf T;
XX WPI; 1995-351090/45.
XX
XX Ribozymes having modified bases and methods for producing them - for use
PT in inhibiting disease related genes.
XX
XX Claim 2; Page 201; 407pp; English.
XX
XX The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the
CC nucleotide base position indicated in the DE line. Regions of the mRNA
CC that do not form secondary folding structures and that contain potential
CC hammerhead and hairpin ribozyme cleavage sites were identified by
CC computer analysis. Ribozymes directed against these mRNA sequences were
CC designed and synthesised with modifications that improve their nuclease
CC resistance. The ribozymes cleave the ICAM-1 target sequences and thereby
CC inhibit ICAM-1 expression, making them useful for reducing transplant
CC rejection and alleviating symptoms in patients with rheumatoid arthritis,
CC asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
CC correct PI field.)
XX
XX Sequence 17 BP; 2 A; 4 C; 7 G; 0 T; 4 U; 0 Other;
SQ
Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 70.6%; Pred. No. 7.3e+02;
Matches 12; Conservative 3; Mismatches 2; Indels 0; Gaps 0;
QY 272 GTGCTGCTCTGGGAA 288


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PN EP747386-A2.
XX 11-DEC-1996.
XX
XX PF 07-JUN-1996; 96EP-00304315.
XX
XX PR 07-JUN-1995; 95US-00484666.
XX PR 07-JUN-1995; 95US-00486408.
XX
XX (GENP-) GEN-PROBE INC.
XX
XX PA Brown SJ, Dattagupta N, Naidu YM;
XX WPI; 1997-023093/03.
XX
XX Oligo(nucleotide(s) complementary to interleukin-6 receptor mRNA - for
XX treating proliferative diseases, e.g. cancer, auto-immune diseases or
XX viral infections.
XX
XX Claim 1; Page 16; 18pp; English.
XX
XX AAT50887-T50904 represent oligonucleotides of the invention. These
XX sequences are all probes for interleukin-6 receptor (IL-6R) mRNA. IL-6 is
XX one of the most well characterised of the cytokines. It functions through
XX interacting with at least two transmembrane glycoprotein receptor
XX molecules on the surface of target cells. The receptors are the IL-6R,
XX and the signal transducer gp130. Signal transduction by IL-6 involves the
XX concerted action of both IL-6R and gp130. IL-6 overproduction is
XX implicated in many different disease states, particularly in cellular
XX proliferation associated with these diseases. These sequences bind to the
XX IL-6R coding sequence, thereby inhibiting IL-6R production. The sequences
XX therefore inhibit the functioning of IL-6. These sequences can be used
XX for inhibiting disease-associated cellular proliferation. The
XX oligonucleotides are especially useful for treating cancer (e.g. renal
XX cell carcinoma), autoimmune diseases or viral infections. They can also
XX be used as probes for detecting IL-6 receptor mRNA, especially for
XX evaluating the effectiveness of drugs in reducing IL-6 receptor mRNA
XX levels
XX
XX Sequence 17 BP; 2 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.8; DB 1; Length 17;
XX Best Local Similarity 88.2%; Pred. No. 7.3e+02;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1596 GGTGGACACCGAGTCTTCT 1612
XX 1 GGTGGACACCTCGTCTTCT 17
XX
XX RESULT 926
XX AAX71472
XX ID AAX71472 standard; RNA; 17 BP.
XX
XX AC AAX71472;
XX
XX DT 28-JUN-1999 (first entry)
XX
XX DE Human KDR VEGF receptor hammerhead ribozyme substrate #484.
XX
XX KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
XX KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
XX tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
XX fms-like tyrosine kinase 1; Kinase insert domain containing receptor;
XX foetal liver kinase 1; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO9715662-A2.
XX
XX PD 01-MAY-1997.
XX
XX PF 25-OCT-1996; 96WO-US017480.

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XX 26-OCT-1995; 95US-0005974P.
XX 11-JAN-1996; 96US-00584040.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX (CHIR ) CHIRON CORP.
XX
XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
XX WPI; 1997-259017/23.
XX
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
XX stability - useful for treating e.g. tumour angiogenesis, psoriasis,
XX rheumatoid arthritis, etc., in a human patient.
XX
XX Claim 4; Page 11; 21pp; English.
XX
XX The present invention describes nucleic acid molecules which modulate the
XX synthesis, expression and/or stability of a mRNA encoding 1 or more
XX receptors of vascular endothelial growth factor (VEGF). A patient of
XX (preferably human) having a condition associated with the level of the
XX fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
XX receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
XX angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
XX treated by administering the nucleic acid molecule or the expression
XX vector to the patient. AAX67275 to AAX75752 represent specific examples
XX of nucleic acid molecules from the present invention
XX
XX Sequence 17 BP; 0 A; 5 C; 7 G; 0 T; 5 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.8; DB 1; Length 17;
XX Best Local Similarity 64.7%; Pred. No. 7.3e+02;
XX Matches 11; Conservative 4; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1035 CTTTGGCTGGCCGAG 1051
XX 1 CUUUGCUUGGCCCGG 17
XX
XX RESULT 927
XX AAA23256/c
XX ID AAA23256 standard; RNA; 17 BP.
XX
XX AC AAA23256;
XX
XX DT 19-JUN-2000 (first entry)
XX
XX DE Integrin subunit beta 3 substrate sequence SEQ ID NO:6482.
XX
XX KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
XX integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
XX hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
XX ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
XX dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
XX age related macular degeneration; inflammation; neovascular glaucoma;
XX myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
XX tuberosus sclerosis; pot-wine stain; Sturge Weber syndrome;
XX Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO9950403-A2.
XX
XX PD 07-OCT-1999.
XX
XX PF 24-MAR-1999; 99WO-US006507.
XX
XX PR 27-MAR-1998; 98US-0079678P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX

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DR WPI; 1999-591315/50.
XX Novel ribozymes for modulating the synthesis, expression and/or stability
PT of an mRNA encoding an angiogenic factors.
XX Claim 54; Page 271; 305pp; English.
PS
XX The present invention describes enzymatic nucleic acid molecules with RNA
CC cleaving activity, which specifically cleave RNA encoded by an aryl
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC and AAA19155 to AAA19222 represent their corresponding target sequences;
CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC AAA21596 to AAA21688 represent their corresponding target sequences;
CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
CC AAA23422 represent their corresponding target sequences. The ribozymes of
CC the invention are used for modulating the synthesis, expression and/or
CC stability of an mRNA encoding angiogenic factor, especially ARNT.
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC especially used to treat cancer, diabetic retinopathy, age related
CC macular degeneration (ARMD), inflammation, and arthritis, as well as
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC angiofibroma of tuberosus sclerosis, pot-wine stains, Sturge Weber
CC syndrome, Kippel-Trenunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC integrin subunit alpha-6, or integrin subunit beta-3
XX
SQ Sequence 17 BP; 3 A; 3 C; 4 G; 0 T; 7 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 7.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 808 ATTATCCACACGGAGAA 824
DB 17 ATTATCCACACGGAGCA 1
RESULT 928
AAV92551
ID AAV92551 standard; RNA; 17 BP.
XX
AC AAV92551;
XX
DT 18-FEB-1999 (first entry)
XX
DE Human A-Raf substrate position 1538.
XX
KW Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;
KW target; substrate; catalyst; modulation; expression; Raf gene; delivery;
KW screening; identification; synthesis; deprotection; purification; cancer;
KW inflammation; psoriasis; non-hepatic ascites; infection; genetic drift;
KW restenosis; rheumatoid arthritis; ss.
XX
OS Homo sapiens.
XX
FN WO9850530-A2.
XX
PD 12-NOV-1998.
XX
XX 05-MAY-1998; 98WO-US009249.
XX
PR 09-MAY-1997; 97US-0046059P.
PR 09-JUN-1997; 97US-0049002P.
PR 03-JUL-1997; 97US-0051718P.
PR 22-AUG-1997; 97US-0056808P.
PR 02-OCT-1997; 97US-0061321P.

PR 02-OCT-1997; 97US-0061324P.
PR 05-NOV-1997; 97US-0064866P.
PR 19-DEC-1997; 97US-0068212P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
XX Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K, Bellon L;
PI Parry T, Beigelman L, Mcswiggen JA, Karpelsky A, Burgin A;
PI Thompson J, Workman CT, Beaudry A, Sweedler D;
XX WPI; 1999-009494/01.
XX Identifying new catalytic nucleic acid that modulates selected processes
PT - especially ribozymes that cleave Raf RNA for treating cancer,
PT restenosis, and also new ribozymes and modified nucleoside triphosphates
PT used as antiviral agents and synthons.
XX
PS Claim 177; Page 160; 259pp; English.
XX A method has been developed for the identification of a nucleic acid
CC capable of modulating a process in a biological system. The method
CC comprises: (a) introducing into the system a random library of nucleic
CC acid catalysts (NAC) having a substrate binding domain (SBD), comprising
CC a random sequence, and a catalytic domain (CD); and (b) identifying NAC
CC in systems where modulation has occurred and/or determining the sequence
CC of at least part of the SBDs in such systems. Nucleic acid molecules with
CC endonuclease activity and catalytic activity, from the present invention,
CC are used to modulate gene expression in plant and mammalian cells and to
CC cleave target nucleic acid, particularly for treating systemic diseases
CC caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic
CC ascites and infection. They may also be used to detect genetic drift and
CC mutations in diseased cells and to determine c-raf RNA. Specifically NACs
CC with RNA-cleaving activity that modulate expression of the Raf gene, are
CC used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or
CC generally any condition associated with the level of c-raf. Introduction
CC of sugar/phosphate modifications increases stability against nuclease and
CC activity. AAV90922 to AAV93877 represent NACs that can be used in the
CC method, specifically for modulating the expression of a Raf gene
XX
SQ Sequence 17 BP; 1 A; 3 C; 7 G; 0 T; 6 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 58.8%; Pred. No. 7.3e+02;
Matches 10; Conservative 5; Mismatches 2; Indels 0; Gaps 0;
QY 1030 GCTGACTTTCGCTGGC 1046
DB 1 GGUGACUUGGCUUGGC 17
RESULT 929
AAA36495
ID AAA36495 standard; DNA; 17 BP.
XX
AC AAA36495;
XX
DT 26-JUL-2000 (first entry)
XX
DE Human genomic SNP allele specific oligonucleotide SEQ ID NO:560.
XX
KW Human; single nucleotide polymorphism; SNP; genotyping; DNA analysis;
KW allele specific oligonucleotide; ASO; reduced complexity genome; RCG;
KW genomic classification; identification; DNA fingerprinting;
KW tumour characterisation; hybridisation; ss.
XX
OS Homo sapiens.
XX
PN WO200018960-A2.
XX
PD 06-APR-2000.
XX
XX 24-SEP-1999; 99WO-US022283.
XX

PR 25-SEP-1998; 98US-0101757P.
 XX
 PA (MASI) MASSACHUSETTS INST TECHNOLOGY.
 XX
 PI Landers JE, Jordan B, Housman DE, Charest A;
 XX WPI; 2000-293181/25.
 DR
 XX Detection of single nucleotide polymorphisms in genomes by preparation
 PT and analysis of reduced complexity genomes, useful for genotyping,
 PT fingerprinting and determining allele frequency of SNPs.
 XX
 XX Disclosure; Page 69; 111pp; English.
 XX
 CC A method has been developed for detecting the presence or absence of a
 CC single nucleotide polymorphism (SNP) allele in a genomic sample. The
 CC method comprises preparing a reduced complexity genome (RCG) from the
 CC genomic sample and analysing the RCG for the presence or absence of a SNP
 CC allele. The method can be used to characterise a tumour, to generate a
 CC genomic pattern for an individual genome or to generate a genomic
 CC classification code for a genome. The method can be used to assess
 CC whether a subject is at risk for developing a disease or to identify a
 CC set of SNP alleles associated with a disease. The method can also be used
 CC to perform linkage analysis. AAA35944 to AAA35947 represent sequences
 CC used in the exemplification of the present invention. AAA35948 to
 CC AAA36632 represent nucleotide sequences containing SNPs
 XX
 SQ Sequence 17 BP; 4 A; 4 C; 4 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.8; DB 1; Length 17;
 Best Local Similarity 88.2%; Pred. No. 7.3e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1112 CTGACATCTCTGCTGGG 1128
 DB 1 CTGACATCTCTGCTAGG 17
 RESULT 930
 AAA72376/c
 ID AAA72376 standard; DNA; 17 BP.
 XX
 AC AAA72376;
 XX
 XX 19-DEC-2000 (first entry)
 DT
 XX Mouse angiotensin II type 2 receptor (AT2 receptor) PCR primer, AT2-R.
 DE
 XX Mouse angiotensin II type 2 receptor; AT2 receptor; vascular tissue;
 XX transgenic animal; blood pressure regulation; PCR primer; ss.
 KW
 XX Mus sp.
 OS
 XX WO200045633-A1.
 FN
 XX 10-AUG-2000.
 PD
 XX 04-FEB-2000; 2000WO-JP000615.
 PF
 XX 05-FEB-1999; 99JP-00029354.
 PR
 XX (SUNR) SUNTORY LTD.
 PA
 XX Kurihara T, Matsubara H;
 PI
 XX WPI; 2000-543434/49.
 DR
 XX Transgenic animals expressing angiotensin II2 receptor gene in vascular
 PT tissue used as a model for studying function and blood pressure
 PT regulatory activity of the receptor.
 XX
 XX Example 3; Page 9; 26pp; Japanese.
 PS
 CC

CC The invention relates to transgenic animals which express the angiotensin
 CC II type 2 receptor (AT2 receptor) gene in vascular tissue. The invention
 CC also relates to a method for the production of transgenic animal of the
 CC invention, comprising inserting the AT2 receptor gene into pluripotent
 CC cells of the animal, implanting and bringing to term to give transgenic
 CC animals whose descendants will also express the AT2 receptor gene. The
 CC transgenic animal is a model system for the study of the vascular
 CC function and blood pressure regulatory function of the AT2 receptor in
 CC vivo or in vitro. It may also be used to study the competitive activity
 CC of AT1 and AT2 receptors. Sequences AAA72375-A72376 represent PCR primers
 CC used in an exemplification of the invention. The present sequence
 CC represents a mouse AT2 receptor PCR primer
 XX
 SQ Sequence 17 BP; 2 A; 4 C; 6 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.8; DB 1; Length 17;
 Best Local Similarity 88.2%; Pred. No. 7.3e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 949 TACTGCCACCGCAGAA 965
 DB 17 TCTGCCACCGCAGAA 1
 RESULT 931
 AAF95069
 ID AAF95069 standard; DNA; 17 BP.
 XX
 AC AAF95069;
 XX
 XX 23-MAY-2001 (first entry)
 DT
 XX Mutant capture oligonucleotide #62.
 DE
 XX Tubercle bacillus; drug sensitivity; drug resistance; rifampicin;
 KW streptomycin; kanamycin; isoniazid; ethambutol; rpoB gene; rrs gene;
 KW rpsL gene; inhA gene; katG gene; emsB gene; probe; PCR primer; ss.
 XX
 OS Mycobacterium tuberculosis.
 XX
 XX BP1076099-A2.
 FN
 XX 14-FEB-2001.
 PD
 XX 02-AUG-2000; 2000EP-00306563.
 PF
 XX 03-AUG-1999; 99JP-00220357.
 PR
 XX (NISN) NISSHINBO IND INC.
 PA (SYST-) SYSTEM RES INC.
 PI
 XX Suzuki Y, Nishida M, Takenishi S;
 XX
 XX WPI; 2001-246696/26.
 DR
 XX New oligonucleotides, nucleic acid probes and primers are useful for
 PT differentiating drug-resistance and determining infection with tubercle
 PT bacilli.
 XX
 XX Claim 16; Page 35; 114pp; English.
 PS
 CC The present invention relates to oligonucleotides based on nucleotide
 CC sequences obtained from both wild-type tubercle bacilli (wtTB) that are
 CC susceptible to a drug and mutant-type tubercle bacilli (mtTB) that are
 CC resistant to a drug. The drugs used in the present invention are
 CC rifampicin (RFP), streptomycin (SM), kanamycin (KM), isoniazid (INH) and
 CC ethambutol (EB). The rpoB gene is responsible for resistance to RFP; the
 CC rrs gene is responsible for resistance to SM and KM; the rpsL gene is
 CC responsible for resistance to SM; the inhA gene is responsible for
 CC resistance to INH; the katG gene is responsible for resistance to INH;
 CC and the emsB gene is responsible for resistance to EB. The present
 CC invention also relates to nucleic acid probes having part of a nucleotide
 CC sequence of tubercle bacilli (TB) responsible for drug resistance and

CC primers used to generate the probes. The present sequence is an
 CC oligonucleotide of the present invention. The oligonucleotides of the
 CC present invention can be used to enable the differentiation of drug
 CC resistance and the determination of infection with tubercle bacilli
 CC simultaneously
 XX
 SQ Sequence 17 BP; 1 A; 7 C; 7 G; 2 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.8; DB 1; Length 17;
 Best Local Similarity 88.2%; Pred. No. 7.3e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1035 CTTTGGCTGCGCCGAG 1051
 Db 1 CCTGGCTGCGCCGAG 17
 RESULT 933
 ABN10018
 ID ABN10018 standard; DNA; 17 BP.
 XX
 AC ABN10018;
 XX
 DT 29-MAY-2002 (first entry)
 XX
 DE Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:10010.
 XX
 KW Human; genome-derived myosin-like protein 1; GDMPLP-1; heart;
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
 KW skeletal muscle disorder; amplicon; screening; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200192524-A2.
 XX
 PD 06-DEC-2001.
 XX
 PF 25-MAY-2001; 2001WO-US016981.
 XX
 PR 26-MAY-2000; 2000US-0207456P.
 PR 21-SEP-2000; 2000US-0234687P.
 PR 27-SEP-2000; 2000US-0236359P.
 PR 04-OCT-2000; 2000GB-00024263.
 PR 30-JAN-2001; 2001WO-US000661.
 PR 30-JAN-2001; 2001WO-US000662.
 PR 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 05-FEB-2001; 2001US-0266860P.
 XX
 PA (AEOM-) AEOMICA INC.
 XX
 PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
 XX
 DR WPI; 2002-179446/23.
 XX
 PT New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
 PT or as specific biomolecule capture probes for surface-enhanced laser
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
 XX
 PS Disclosure; SEQ ID NO 10010; 214pp; English.
 XX
 CC The present invention describes a human genome-derived myosin-like
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
 CC nucleic acids can be used as probes to detect, characterise and quantify
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1

CC protein variants having desired phenotypic improvements, and for
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP-
 CC 1 proteins, as standards in assays used to determine the concentration
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
 CC capture probes for surface-enhanced laser desorption ionisation, as
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
 CC production, and in vaccines or for replacement therapy. The
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
 CC disorder associated with the expression of hGDMPLP-1, in particular heart
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
 CC The present sequence represents an oligomer used in the screening of the
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
 CC The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequence
 XX
 SQ Sequence 17 BP; 1 A; 5 C; 8 G; 3 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.8; DB 1; Length 17;
 Best Local Similarity 88.2%; Pred. No. 7.3e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 386 CGTCTCGGATGAGGTG 402
 Db 1 CGTCTCGGATGAGGTG 17
 RESULT 933
 ABN08053
 ID ABN08053 standard; DNA; 17 BP.
 XX
 AC ABN08053;
 XX
 DT 29-MAY-2002 (first entry)
 XX
 DE Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8045.
 XX
 KW Human; genome-derived myosin-like protein 1; GDMPLP-1; heart;
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
 KW skeletal muscle disorder; amplicon; screening; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200192524-A2.
 XX
 PD 06-DEC-2001.
 XX
 PF 25-MAY-2001; 2001WO-US016981.
 XX
 PR 26-MAY-2000; 2000US-0207456P.
 PR 21-SEP-2000; 2000US-0234687P.
 PR 27-SEP-2000; 2000US-0236359P.
 PR 04-OCT-2000; 2000GB-00024263.
 PR 30-JAN-2001; 2001WO-US000661.
 PR 30-JAN-2001; 2001WO-US000662.
 PR 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 05-FEB-2001; 2001US-0266860P.
 XX
 PA (AEOM-) AEOMICA INC.
 XX
 PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
 XX
 DR WPI; 2002-179446/23.
 XX
 PT New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,

PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
XX
XX Disclosure; SEQ ID NO 8045; 214pp; English.
XX
XX The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMPLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption/ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMPLP-1, in particular heart
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
XX Sequence 17 BP; 6 A; 2 C; 7 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 7.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 127 GATCGGATGAAGAAGAT 143
DB 1 GAGCGGATGACAGAT 17
RESULT 934
ABN06804/c
ID ABN06804 standard; DNA; 17 BP.
AC ABN06804;
XX
XX 29-MAY-2002 (first entry)
XX Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6796.
XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
XX muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
XX skeletal muscle disorder; amplicon; screening; ss.
XX Homo sapiens.
XX OS
XX WO200192524-A2.
XX PD
XX 06-DEC-2001.
XX
XX 25-MAY-2001; 2001WO-US016981.
XX
XX 26-MAY-2000; 2000US-0207456P.
XX 21-SEP-2000; 2000US-0234687P.
XX 27-SEP-2000; 2000US-0236359P.
XX 04-OCT-2000; 2000GB-00024263.
XX 30-JAN-2001; 2001WO-US000661.
XX 30-JAN-2001; 2001WO-US000662.
XX 30-JAN-2001; 2001WO-US000663.
XX 30-JAN-2001; 2001WO-US000664.
XX 30-JAN-2001; 2001WO-US000665.
XX 30-JAN-2001; 2001WO-US000666.
XX 30-JAN-2001; 2001WO-US000667.
XX 30-JAN-2001; 2001WO-US000668.
PR
PR or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
XX
XX Disclosure; SEQ ID NO 6796; 214pp; English.
XX
XX The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMPLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption/ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMPLP-1, in particular heart
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
XX Sequence 17 BP; 0 A; 3 C; 11 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 7.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 552 GCCCTCAGCGCGGCC 568
DB 17 GCCCAGCGCGGCC 1
RESULT 935
ABN01534/c
ID ABN01534 standard; DNA; 17 BP.
AC ABN01534;
XX
XX 29-MAY-2002 (first entry)
XX Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:1526.
XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
XX muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
XX skeletal muscle disorder; amplicon; screening; ss.
XX Homo sapiens.
XX OS
XX WO200192524-A2.
XX PN
XX 06-DEC-2001.
XX
XX 25-MAY-2001; 2001WO-US016981.
XX
XX 26-MAY-2000; 2000US-0207456P.
XX

PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 05-FEB-2001; 2001US-0266860P.
XX (AEOM-) AEOMICA INC.

PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;

XX WPI; 2002-179446/23.

XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.

PS Disclosure; SEQ ID NO 1526; 214pp; English.

XX The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
CC nucleic acids can be used as probes to detect, characterize and quantify
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMPLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption/ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMPLP-1, in particular heart
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence

XX Sequence 17 BP; 3 A; 2 C; 9 G; 3 T; 0 U; 0 Other;

XX Query Match 0.8%; Score 13.8; DB 1; Length 17;
XX Best Local Similarity 88.2%; Pred. No. 7.3e+02;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 986 AGCCACAGAACTGCTC 1002

DB 17 AGCCCCATCACCCTGCTC 1

RESULT 936

ABN10672/C

ID ABN10672 standard; DNA; 17 BP.

XX AC ABN10672;

XX 29-MAY-2002 (first entry)

DE Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:10664.

XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
XX muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;

XX skeletal muscle disorder; amplicon; screening; ss.

XX Homo sapiens.

XX WO200192524-A2.

XX 06-DEC-2001.

XX 25-MAY-2001; 2001WO-US016981.

XX 26-MAY-2000; 2000US-0207456P.

PR 21-SEP-2000; 2000US-0234687P.

PR 27-SEP-2000; 2000US-0236359P.

PR 04-OCT-2000; 2000GB-00024263.

PR 30-JAN-2001; 2001WO-US000661.

PR 30-JAN-2001; 2001WO-US000662.

PR 30-JAN-2001; 2001WO-US000663.

PR 30-JAN-2001; 2001WO-US000664.

PR 30-JAN-2001; 2001WO-US000665.

PR 30-JAN-2001; 2001WO-US000666.

PR 30-JAN-2001; 2001WO-US000667.

PR 30-JAN-2001; 2001WO-US000668.

PR 30-JAN-2001; 2001WO-US000669.

PR 05-FEB-2001; 2001US-0266860P.

XX (AEOM-) AEOMICA INC.

PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;

XX WPI; 2002-179446/23.

XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.

PS Disclosure; SEQ ID NO 10664; 214pp; English.

XX The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
CC nucleic acids can be used as probes to detect, characterize and quantify
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMPLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption/ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMPLP-1, in particular heart
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence

XX Sequence 17 BP; 4 A; 7 C; 6 G; 0 T; 0 U; 0 Other;

XX Query Match 0.8%; Score 13.8; DB 1; Length 17;
XX Best Local Similarity 88.2%; Pred. No. 7.3e+02;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1026 GCTGCTGACTTGGCC 1042

DB 17 GTGGCTGCTTGGCC 1

RESULT 937

ABN06803/c
ID ABN06803 standard; DNA; 17 BP.
AC ABN06803;
XX
XX 29-MAY-2002 (first entry)
DE Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6795.
XX
XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
XX WO200192524-A2.
XX
XX 06-DEC-2001.
XX
XX 25-MAY-2001; 2001WO-US016981.
XX
XX 26-MAY-2000; 2000US-0207456P.
XX
XX 21-SEP-2000; 2000US-0234687P.
XX
XX 27-SEP-2000; 2000US-0236359P.
XX
XX 04-OCT-2000; 2000GB-00024263.
XX
XX 30-JAN-2001; 2001WO-US000661.
XX
XX 30-JAN-2001; 2001WO-US000662.
XX
XX 30-JAN-2001; 2001WO-US000663.
XX
XX 30-JAN-2001; 2001WO-US000664.
XX
XX 30-JAN-2001; 2001WO-US000665.
XX
XX 30-JAN-2001; 2001WO-US000666.
XX
XX 30-JAN-2001; 2001WO-US000667.
XX
XX 30-JAN-2001; 2001WO-US000668.
XX
XX 30-JAN-2001; 2001WO-US000669.
XX
XX 30-JAN-2001; 2001WO-US000670.
XX
XX 05-FEB-2001; 2001US-0266860P.
XX
XX (AEOM-) AEOMICA INC.
XX
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX WPI; 2002-179446/23.
XX
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
XX
XX Disclosure; SEQ ID NO 6795; 214pp; English.
XX
XX The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMPLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption/ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMPLP-1, in particular heart
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
XX Sequence 17 BP; 1 A; 2 C; 11 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.9; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. NO. 7.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 553 CCCTTCAGCGCGCGCT 569
DB 17 CCCACAGCCACCGCT 1
RESULT 938
ABQ63455/c
ID ABQ63455 standard; DNA; 17 BP.
XX
XX AC ABQ63455;
XX
XX 20-AUG-2002 (first entry)
XX
XX Human KTOM1a portion (ABQ63232) probe # 168.
XX
XX Human; KTOM1a; KTOM1; kidney tumour overexpressed membrane; cytostatic;
KW gene therapy; cancer; kidney; liver; bone marrow; brain; heart; lung;
KW kidney; colon; skeletal muscle; testis; uterus; placenta; probe; ss.
XX
XX Homo sapiens.
XX
XX WO200224750-A2.
XX
XX 28-MAR-2002.
XX
XX 21-SEP-2001; 2001WO-US029656.
XX
XX 21-SEP-2000; 2000US-0234687P.
XX
XX 27-SEP-2000; 2000US-0236359P.
XX
XX 04-OCT-2000; 2000GB-00024263.
XX
XX 30-JAN-2001; 2001WO-US000661.
XX
XX 30-JAN-2001; 2001WO-US000662.
XX
XX 30-JAN-2001; 2001WO-US000663.
XX
XX 30-JAN-2001; 2001WO-US000664.
XX
XX 30-JAN-2001; 2001WO-US000665.
XX
XX 30-JAN-2001; 2001WO-US000666.
XX
XX 30-JAN-2001; 2001WO-US000667.
XX
XX 30-JAN-2001; 2001WO-US000668.
XX
XX 30-JAN-2001; 2001WO-US000669.
XX
XX 30-JAN-2001; 2001WO-US000670.
XX
XX 23-MAY-2001; 2001US-00864761.
XX
XX 28-AUG-2001; 2001US-0315676P.
XX
XX (AEOM-) AEOMICA INC.
XX
XX Zhang J;
XX WPI; 2002-479509/51.
XX
XX New human kidney tumor overexpressed membrane (KTOM1) protein and nucleic
PT acids encoding the protein, useful for treating subjects having defects
PT in KTOM1 which can manifest as cancer of the kidney, or as a disorder of
PT e.g., liver or bone.
XX
XX Example 2; Page 179; 418pp; English.
XX
XX The invention relates to a novel isolated nucleic acid encoding human
CC KTOM1 (kidney tumor overexpressed membrane) protein. The protein of the
CC invention has cytostatic activity. The nucleotide may have a use in gene
CC therapy. The KTOM1 nucleic acids may be used to diagnose, treat or
CC monitor a disease caused by altered expression of human KTOM1.
CC Compositions comprising the nucleic acids, proteins or antibodies may be
CC used to treat subjects having defects in KTOM1 which can manifest as
CC cancer of the kidney, as well as a disorder of liver, bone marrow, brain,
CC heart, lung, kidney, colon, skeletal muscle, testis, uterus and placenta
CC function. The sequence represents a probe used in the invention to scan
CC the nt 1-1001 portion of human KTOM1a (ABQ63232)
XX

SQ Sequence 17 BP; 5 A; 8 C; 2 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 7.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1397 AGCTGTTTCAGTTTCAG 1413
| | | | | | | | | | | | | | | | | | | | |
DB 17 AGCTGTTTCAGTTGCG 1

RESULT 939
ABK18593
ID ABK18593 standard; RNA; 17 BP.
XX
AC ABK18593;
XX
DT 09-APR-2002 (first entry)
XX
DE Human ERG G-cleaver ribozyme target sequence Seq ID No 1240.
XX
KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
KW vulvar; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
KW angiofibroma of tuberosus scleriosis; port-wine stain; wound healing;
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
KW Osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNazyme; inozyme;
KW amberzyme.
XX
OS Homo sapiens.
XX
PN WO200188124-A2.
XX
PD 22-NOV-2001.
XX
PF 16-MAY-2001; 2001WO-US015866.
XX
PR 16-MAY-2000; 2000US-00572021.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (GLAX) GLAXO GROUP LTD.
XX
PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;
XX
PS WPI; 2002-082995/11.
XX
PT Novel polynucleotide which down regulates expression of Ets-related gene,
PT useful for treating cancer, diabetic retinopathy, macular degeneration,
PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX
PS Claim 4; Page 82; 149pp; English.
XX
CC The invention relates to a nucleic acid molecule (I) which down regulates
CC expression of an Ets-related gene (ERG). (I) is useful for treating
CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
CC tumour angiogenesis, diabetic retinopathy, macular degeneration,
CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
CC vulgaris, angiofibroma of tuberosus scleriosis, port-wine stains, Sturge
CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
CC treating a patient having a condition associated with the level of ERG,
CC by contacting cells of the patient with (I) under conditions suitable for
CC the treatment. The method comprises the use of one or more therapies
CC under conditions suitable for the treatment. Leukaemia or tumour
CC angiogenesis is treated by administering (I) to the patient in
CC conjunction with one or more of other therapies such as radiation or
CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
CC cation such as Mg2+. (I) is useful for diagnosis of conditions and
CC diseases related to the expression of ERG, and as diagnostic tool to

CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of ERG RNA in a cell. (I) is useful for specifically
CC targeting genes that share homology with ERG gene or ERG fusion genes.
CC ABK17354-ABK22719 represent nucleic acids, including antisense and
CC enzymatic nucleic acid molecules which regulate expression of ERG, and
CC related PCR primers of the invention
XX
SQ Sequence 17 BP; 1 A; 9 C; 4 G; 0 T; 3 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 70.6%; Pred. No. 7.3e+02;
Matches 12; Conservative 3; Mismatches 2; Indels 0; Gaps 0;
QY 557 TCAGCGCGCGCTCCGT 573
: | | | | | | | | | | | | | | | | | | | | |
DB 1 UCAGCGCGCGCCUCCGU 17

RESULT 940
ABK18786
ID ABK18786 standard; RNA; 17 BP.
XX
AC ABK18786;
XX
DT 09-APR-2002 (first entry)
XX
DE Human ERG DNazyme target sequence Seq ID No 1433.
XX
KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
KW vulvar; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
KW angiofibroma of tuberosus scleriosis; port-wine stain; wound healing;
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
KW Osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNazyme; inozyme;
KW amberzyme.
XX
OS Homo sapiens.
XX
PN WO200188124-A2.
XX
PD 22-NOV-2001.
XX
PF 16-MAY-2001; 2001WO-US015866.
XX
PR 16-MAY-2000; 2000US-00572021.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (GLAX) GLAXO GROUP LTD.
XX
PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;
XX
PS WPI; 2002-082995/11.
XX
PT Novel polynucleotide which down regulates expression of Ets-related gene,
PT useful for treating cancer, diabetic retinopathy, macular degeneration,
PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX
PS Claim 4; Page 91; 149pp; English.
XX
CC The invention relates to a nucleic acid molecule (I) which down regulates
CC expression of an Ets-related gene (ERG). (I) is useful for treating
CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
CC tumour angiogenesis, diabetic retinopathy, macular degeneration,
CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
CC vulgaris, angiofibroma of tuberosus scleriosis, port-wine stains, Sturge
CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
CC treating a patient having a condition associated with the level of ERG,
CC by contacting cells of the patient with (I) under conditions suitable for
CC the treatment. The method comprises the use of one or more therapies
CC under conditions suitable for the treatment. Leukaemia or tumour
CC angiogenesis is treated by administering (I) to the patient in
CC conjunction with one or more of other therapies such as radiation or
CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
CC cation such as Mg2+. (I) is useful for diagnosis of conditions and
CC diseases related to the expression of ERG, and as diagnostic tool to

CC angiogenesis is treated by administering (I) to the patient in
 CC conjunction with one or more of other therapies such as radiation or
 CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
 CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
 CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
 CC cation such as Mg²⁺. (I) is useful for diagnosis of conditions and
 CC diseases related to the expression of ERG, and as diagnostic tool to
 CC examine genetic drift and mutations within diseased cells or to detect
 CC the presence of ERG RNA in a cell. (I) is useful for specifically
 CC targeting genes that share homology with ERG gene or ERG fusion genes.
 CC ABK17354-ABK22719 represent nucleic acids, including antisense and
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and
 CC related PCR primers of the invention
 XX
 SQ Sequence 17 BP; 4 A; 5 C; 6 G; 0 T; 2 U; 0 Other;
 Query Match 0.8%; Score 13.8; DB 1; Length 17;
 Best Local Similarity 76.5%; Pred. No. 7.3e+02;
 Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0;
 QY 705 GGAGATCAGACTGGAC 721
 Db 1 GGAGATCAGCCUGGACC 17
 RESULT 941
 ABS75050
 ID ABS75050 standard; DNA; 17 BP.
 AC ABS75050;
 XX
 XX 24-DEC-2002 (first entry)
 DT
 DE Human PAPP-Ea associated 17-mer SEQ ID 576.
 XX
 XX PAPP-E; human; pregnancy associated plasma protein E; abortive;
 KW contraceptive; Gene therapy; vaccine; pregnancy; antenatal; diagnosis;
 KW dysgenetic pregnancy; primer; ss.
 XX
 XX Homo sapiens.
 OS
 XX US2002102252-A1.
 FN
 XX 01-AUG-2002.
 DD
 XX 06-APR-2001; 2001US-00827998.
 PF
 XX 26-MAY-2000; 2000US-0207456P.
 PR
 XX (GUY/) GU Y.
 PA (SHAN/) SHANNON M E.
 XX
 XX Gu Y, Shannon ME;
 FI
 XX WPI; 2002-697817/75.
 DR
 XX
 XX New isolated nucleic acid encoding an isoform of human pregnancy
 PT associated plasma protein E, for preventing or aborting pregnancy.
 PT
 XX Example 2; Page 151; 353pp; English.
 PS
 XX This invention describes a novel isolated nucleic acid that encodes one
 CC of three new isoforms of human pregnancy associated plasma protein E,
 CC hPAPP-E. The products of the invention have abortive and contraceptive
 CC activity and can be used for gene therapy or in a vaccine. The nucleic
 CC acid, polypeptide encoded by it, or antibody to the polypeptide can be
 CC used in pharmaceutical compositions or vaccines for preventing or
 CC aborting pregnancy. PAPP-E is used in the antenatal diagnosis of
 CC dysgenetic pregnancies. The nucleic acids are used as probes to assess
 CC the level of PAPP-E isoform mRNA in chorionic villus samples, and the
 CC antibodies can be used to assess the expression levels of PAPP-E isoform
 CC proteins in chorionic villus samples, to diagnose dysgenetic pregnancies
 CC antenatally. This sequence represents an oligomer used in scanning the

CC human PAPP-E genes described in the disclosure of the invention
 XX
 SQ Sequence 17 BP; 6 A; 2 C; 8 G; 1 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.8; DB 1; Length 17;
 Best Local Similarity 88.2%; Pred. No. 7.3e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1011 GAGGGAGAGCTCAAGC 1027
 Db 1 GAGGGAGAGGTCACGC 17
 RESULT 942
 ABS75049
 ID ABS75049 standard; DNA; 17 BP.
 XX
 AC ABS75049;
 XX
 XX 24-DEC-2002 (first entry)
 DT
 DE Human PAPP-Ea associated 17-mer SEQ ID 575.
 XX
 XX PAPP-E; human; pregnancy associated plasma protein E; abortive;
 KW contraceptive; Gene therapy; vaccine; pregnancy; antenatal; diagnosis;
 KW dysgenetic pregnancy; primer; ss.
 XX
 XX Homo sapiens.
 OS
 XX US2002102252-A1.
 FN
 XX 01-AUG-2002.
 DD
 XX 06-APR-2001; 2001US-00827998.
 PF
 XX 26-MAY-2000; 2000US-0207456P.
 PR
 XX (GUY/) GU Y.
 PA (SHAN/) SHANNON M E.
 XX
 XX Gu Y, Shannon ME;
 FI
 XX WPI; 2002-697817/75.
 DR
 XX
 XX New isolated nucleic acid encoding an isoform of human pregnancy
 PT associated plasma protein E, for preventing or aborting pregnancy.
 PT
 XX Example 2; Page 150; 353pp; English.
 PS
 XX This invention describes a novel isolated nucleic acid that encodes one
 CC of three new isoforms of human pregnancy associated plasma protein E,
 CC hPAPP-E. The products of the invention have abortive and contraceptive
 CC activity and can be used for gene therapy or in a vaccine. The nucleic
 CC acid, polypeptide encoded by it, or antibody to the polypeptide can be
 CC used in pharmaceutical compositions or vaccines for preventing or
 CC aborting pregnancy. PAPP-E is used in the antenatal diagnosis of
 CC dysgenetic pregnancies. The nucleic acids are used as probes to assess
 CC the level of PAPP-E isoform mRNA in chorionic villus samples, and the
 CC antibodies can be used to assess the expression levels of PAPP-E isoform
 CC proteins in chorionic villus samples, to diagnose dysgenetic pregnancies
 CC antenatally. This sequence represents an oligomer used in scanning the
 CC human PAPP-E genes described in the disclosure of the invention
 XX
 SQ Sequence 17 BP; 7 A; 1 C; 8 G; 1 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.8; DB 1; Length 17;
 Best Local Similarity 88.2%; Pred. No. 7.3e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1010 AGAGGGAGAGCTCAAG 1026
 Db 1 AGAGGGAGAGGTCACGC 17

RESULT 943
ABV89395/C
ID ABV89395 standard; DNA; 17 BP.

XX AC ABV89395;

XX DT 23-DEC-2002 (first entry)

XX DE Human POSHL1 scanning oligonucleotide SEQ ID NO 108.

XX KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW gene therapy; transgenic; ss.

XX OS Homo sapiens.

XX FN EP1239051-A2.

XX PD 11-SEP-2002.

XX PF 28-JAN-2002; 2002EP-00001165.

XX PR 30-JAN-2001; 2001WO-US0000663.

XX PR 30-JAN-2001; 2001WO-US0000664.

XX PR 30-JAN-2001; 2001WO-US0000665.

XX PR 30-JAN-2001; 2001WO-US0000666.

XX PR 30-JAN-2001; 2001WO-US0000667.

XX PR 30-JAN-2001; 2001WO-US0000668.

XX PR 30-JAN-2001; 2001WO-US0000669.

XX PR 30-JAN-2001; 2001WO-US0000670.

XX PR 23-MAY-2001; 2001WO-US0000671.

XX PR 10-OCT-2001; 2001US-0328205P.

XX PA (AEOM-) AECOMICA INC.

XX PI Shannon M;

XX DR WPI; 2002-684061/74.

XX PT Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT -1, useful for treating disorders associated with decreased expression or
PT activity of human POSHL1.

XX PS Example 2; SEQ ID NO 108; 60pp + Sequence Listing; English.

XX CC The invention relates to an isolated SH3 domain (POSH)-like signalling
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC (S1) having 95% deviations, especially conservative substitutions or a
CC fragment of the sequences comprising at least 8 contiguous amino acids.
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC adaptor protein that interacts with Rho family small GTPases as well as
CC downstream components of the signal transduction pathway. (I) is useful
CC for identifying a specific binding partner. (I) and nucleic acids (II)
CC encoding (I) are useful for diagnosing, monitoring disease and treating
CC caused by altered expression of human POSHL1 including diagnosing and
CC treating cancer, they are useful in the development of vaccines and (II) is
CC useful in gene therapy. (II) is useful for constructing microarrays which
CC are useful for measuring and for surveying gene expression and creating
CC transgenic non-human animals capable of producing the proteins. The
CC present sequence is that of a scanning oligonucleotide useful in examples
CC of the invention. Note: The present sequence did not form part of the
CC printed specification, but is based on sequence information supplied to
CC Derwent by the European Patent Office

XX SQ Sequence 17 BP; 3 A; 2 C; 11 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 17;

Best Local Similarity 88.2%; Pred. No. 7.3e+02; Indels 0; Gaps 0;

Matches 15; Conservative 0; Mismatches 2;

Qy 556 CTCAGCGCGCGCTCCG 572

Db 17 CTCAGCGCGCGCTCCG 1

RESULT 944

ABV89567/C

ID ABV89567 standard; DNA; 17 BP.

XX AC ABV89567;

XX DT 23-DEC-2002 (first entry)

XX DE Human POSHL1 scanning oligonucleotide SEQ ID NO 280.

XX KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW gene therapy; transgenic; ss.

XX OS Homo sapiens.

XX FN EP1239051-A2.

XX PD 11-SEP-2002.

XX PF 28-JAN-2002; 2002EP-00001165.

XX PR 30-JAN-2001; 2001WO-US0000663.

XX PR 30-JAN-2001; 2001WO-US0000664.

XX PR 30-JAN-2001; 2001WO-US0000665.

XX PR 30-JAN-2001; 2001WO-US0000666.

XX PR 30-JAN-2001; 2001WO-US0000667.

XX PR 30-JAN-2001; 2001WO-US0000668.

XX PR 30-JAN-2001; 2001WO-US0000669.

XX PR 23-MAY-2001; 2001WO-US0000670.

XX PR 10-OCT-2001; 2001US-0328205P.

XX PA (AEOM-) AECOMICA INC.

XX PI Shannon M;

XX DR WPI; 2002-684061/74.

XX PT Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT -1, useful for treating disorders associated with decreased expression or
PT activity of human POSHL1.

XX PS Example 2; SEQ ID NO 280; 60pp + Sequence Listing; English.

XX CC The invention relates to an isolated SH3 domain (POSH)-like signalling
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC (S1) having 95% deviations, especially conservative substitutions or a
CC fragment of the sequences comprising at least 8 contiguous amino acids.
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC adaptor protein that interacts with Rho family small GTPases as well as
CC downstream components of the signal transduction pathway. (I) is useful
CC for identifying a specific binding partner. (I) and nucleic acids (II)
CC encoding (I) are useful for diagnosing, monitoring disease and treating
CC caused by altered expression of human POSHL1 including diagnosing and
CC treating cancer, they are useful in the development of vaccines and (II) is
CC useful in gene therapy. (II) is useful for constructing microarrays which
CC are useful for measuring and for surveying gene expression and creating
CC transgenic non-human animals capable of producing the proteins. The
CC present sequence is that of a scanning oligonucleotide useful in examples
CC of the invention. Note: The present sequence did not form part of the
CC printed specification, but is based on sequence information supplied to
CC Derwent by the European Patent Office

XX SQ Sequence 17 BP; 2 A; 4 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 17;

Best Local Similarity 88.2%; Pred. No. 7.3e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 596 GGCACTCAGGAGATCA 712
Db 17 GGCACTCAGGAGATCA 1

RESULT 945
ABV91270
ID ABV91270 standard; DNA; 17 BP.
XX
AC ABV91270;
DT 23-DEC-2002 (first entry)
XX
DE Human POSHL1 scanning oligonucleotide SEQ ID NO 1983.
XX
KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW gene therapy; transgenic; ss.
XX
OS Homo sapiens.
XX
PN EP1239051-A2.
XX
PD 11-SEP-2002.
XX
PF 28-JAN-2002; 2002EP-00001165.
XX
PR 30-JAN-2001; 2001WO-US0000663.
PR 30-JAN-2001; 2001WO-US0000664.
PR 30-JAN-2001; 2001WO-US0000665.
PR 30-JAN-2001; 2001WO-US0000666.
PR 30-JAN-2001; 2001WO-US0000667.
PR 30-JAN-2001; 2001WO-US0000668.
PR 30-JAN-2001; 2001WO-US0000669.
PR 30-JAN-2001; 2001WO-US0000670.
PR 23-MAY-2001; 2001US-00864761.
PR 10-OCT-2001; 2001US-0328205P.
XX
PA (ABOM-) AEOMICA INC.
XX
PI Shannon M;
PI
DR WPI; 2002-684061/74.
XX
PT Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT -1, useful for treating disorders associated with decreased expression or
PT activity of human POSHL1.
XX
PS Example 2; SEQ ID NO 1983; 60pp + Sequence Listing; English.
XX
CC The invention relates to an isolated SH3 domain (POSH)-like signalling
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC acids (SI, ABB8399), a sequence having 65% sequence identity to (SI),
CC (SI) having 95% deviations, especially conservative substitutions or a
CC fragment of the sequences comprising at least 8 contiguous amino acids.
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC adaptor protein that interacts with Rho family small GTPases as well as
CC downstream components of the signal transduction pathway. (I) is useful
CC for identifying a specific binding partner. (I) and nucleic acids (II)
CC encoding (I) are useful for diagnosing, monitoring disease and treating
CC caused by altered expression of human POSHL1 including diagnosing and
CC treating cancer, they useful in the development of vaccines and (II) is
CC useful in gene therapy. (II) is useful for constructing microarrays which
CC are useful for measuring and for surveying gene expression and creating
CC transgenic non-human animals capable of producing the proteins. The
CC present sequence is that of a scanning oligonucleotide useful in examples
CC of the invention. Note: The present sequence did not form part of the
CC printed specification, but is based on sequence information supplied to
CC Derwent by the European Patent Office
XX
SQ Sequence 17 BP; 2 A; 8 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 7.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1662 CCCTCAGGGGAGGCC 1678
Db 1 CCCTCAGGGGAGGCC 17

RESULT 946
ABK56437
ID ABK56437 standard; RNA; 17 BP.
XX
AC ABK56437;
DT 02-JUL-2002 (first entry)
XX
DE Human CLCA1 gene enzymatic nucleic acid #808.
XX
KW Human; chloride channel calcium activated 1; CLCA1; ss; antiaesthetic;
KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
KW acetylcysteine.
XX
OS Homo sapiens.
XX
PN WO200211674-A2.
XX
PD 14-FEB-2002.
XX
PF 09-AUG-2001; 2001WO-US024970.
XX
PR 09-AUG-2000; 2000US-0224383P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (SYNT) SYNTAX USA LLC.
PA (THOM/) THOMPSON J.
XX
PI Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski D;
PI Grupe A;
PI
DR WPI; 2002-217145/27.
XX
PT Enzymatic polynucleotide that down regulates expression of chloride
PT channel calcium activated gene, useful for treating Chronic obstructive
PT pulmonary disease (COPD), chronic bronchitis and asthma.
XX
PS Claim 4; Page 70; 152pp; English.
XX
CC The invention relates to enzymatic nucleic acid molecules that down
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes
CC by cleaving RNA derived from the genes. The nucleic acid sequences are
CC useful as pharmaceutical agents for treating conditions such as chronic
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions
CC that are related to or will respond to the levels of CLCA1 in a cell or
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,
CC hence, are useful for treatment of a patient having a condition
CC associated with the level of CLCA1, where the invention further comprises
CC the use of one or more therapies under conditions suitable for the
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The
CC nucleic acids of the invention are also used as diagnostic tools to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of CLCA1 RNA in a cell. This sequence represents an
CC enzymatic nucleic acid molecule of the invention
XX
SQ Sequence 17 BP; 6 A; 5 C; 4 G; 0 T; 2 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 76.5%; Pred. No. 7.3e+02;

Matches	13;	Conservative	2;	Mismatches	2;	Indels	0;	Gaps	0;
QY	1571	ACTCAGGAGCCAGCT	1587						
		: :							
DB	1	AAUCAAGCAGCCAGCU	17						
RESULT 947									
ID	ABK57127	standard; RNA; 17 BP.							
XX	AC	ABK57127;							
XX	DT	02-JUL-2002 (first entry)							
XX	DE	Human CLCA1 gene enzymatic nucleic acid #1498.							
XX	KW	Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;							
XX	KW	antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;							
XX	KW	chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;							
XX	KW	oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;							
XX	KW	acetylcysteine.							
XX	OS	Homo sapiens.							
XX	OS	WO200211674-A2.							
XX	PN	14-FEB-2002.							
XX	PD								
XX	PF	09-AUG-2001; 2001WO-US024970.							
XX	PF	09-AUG-2000; 2000US-0224383P.							
XX	PR								
XX	XX	{RIBO-} RIBOZYME PHARM INC.							
XX	PA	{SYNT } SYNTEX USA LLC.							
XX	PA	{THOM/} THOMPSON J.							
XX	XX	Thompson J, Mcswiggen J, Mckenzie T, Ayers D, Szymkowski DE;							
PI	PI	Grube A;							
XX	XX	WPI; 2002-217145/27.							
XX	DR								
XX	PT	Enzymatic polynucleotide that down regulates expression of chloride							
XX	PT	channel calcium activated gene, useful for treating Chronic obstructive							
XX	PT	pulmonary disease (COPD), chronic bronchitis and asthma.							
XX	PT	Claim 4; Page 96; 152pp; English.							
XX	PS								
XX	XX	The invention relates to enzymatic nucleic acid molecules that down							
CC	CC	regulate expression of chloride channel calcium activated 1 (CLCA1) genes							
CC	CC	by cleaving RNA derived from the genes. The nucleic acid sequences are							
CC	CC	useful as pharmaceutical agents for treating conditions such as chronic							
CC	CC	obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic							
CC	CC	fibrosis, obstructive bowel syndrome and any other diseases or conditions							
CC	CC	that are related to or will respond to the levels of CLCA1 in a cell or							
CC	CC	tissue. The sequences are useful for reducing CLCA1 activity in a cell,							
CC	CC	hence, are useful for treatment of a patient having a condition							
CC	CC	associated with the level of CLCA1, where the invention further comprises							
CC	CC	the use of one or more therapies under conditions suitable for the							
CC	CC	treatment, for example, oxygen therapy, bronchodilators, corticosteroids,							
CC	CC	antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The							
CC	CC	nucleic acids of the invention are also used as diagnostic tools to							
CC	CC	examine genetic drift and mutations within diseased cells or to detect							
CC	CC	the presence of CLCA1 RNA in a cell. This sequence represents an							
CC	CC	enzymatic nucleic acid molecule of the invention							
XX	XX								
XX	XX	Sequence 17 BP; 6 A; 4 C; 5 G; 0 T; 2 U; 0 Other;							
Query Match 0.8%; Score 13.8; DB 1; Length 17;									
Best Local Similarity 76.5%; Pred. No. 7.3e+02;									
Matches	13;	Conservative	2;	Mismatches	2;	Indels	0;	Gaps	0;
QY	1569	TGACTCAGCAGCCAG	1585						

[illegible]

```
RESULT 949
ADB03435
ID ADB03435 standard; DNA; 17 BP.
XX
AC ADB03435;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human MD27 scanning oligonucleotide SEQ ID 4421.
XX
KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX
OS Homo sapiens.
XX
PN EP1281758-A2.
XX
PD 05-FEB-2003.
XX
XX 30-JUL-2002; 2002EP-00016974.
XX
XX 02-AUG-2001; 2001US-00922181.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Shannon M, Gu Y, Nguyen C;
XX
DR WPI; 2003-423107/40.
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MD23,
PT MD24, MD27 or MD212, e.g. cancer.
XX
XX Example 8; SEQ ID NO 4421; 103pp; English.
XX
XX The present invention relates to novel human zinc finger-containing
CC proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is
CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder
CC associated with decreased or increased expression or activity of MD23,
CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.
XX
SQ Sequence 17 BP; 0 A; 10 C; 3 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 7.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 921 CCTGTTCCAGTGTCTCC 937
DB 1 CCTGTTCCAGTGTCTCC 17
RESULT 950
ABZ59905/C
ID ABZ59905 standard; RNA; 17 BP.
XX
AC ABZ59905;
XX
DT 21-MAR-2003 (first entry)
XX
```

```
XX Human K-Ras DNzyme substrate #17.
DE Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
KW
XX Homo sapiens.
OS
PN WO200297114-A2.
XX
PD 05-DEC-2002.
XX
XX 29-MAY-2002; 2002WO-US016840.
XX
XX 29-MAY-2001; 2001US-0294140P.
PR
PR 06-JUN-2001; 2001US-0296249P.
PR
PR 10-SEP-2001; 2001US-0318471P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J;
PI
XX WPI; 2003-140484/13.
XX
XX Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
XX Claim 58; Page 85; 185pp; English.
XX
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ66531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66589 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
SQ Sequence 17 BP; 2 A; 4 C; 9 G; 0 T; 2 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 7.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 559 AGCGCGCGCTCGTTCG 575
DB 17 AGCGCGCGCGCACCTTCG 1
RESULT 951
ABZ65100
ID ABZ65100 standard; RNA; 17 BP.
XX
AC ABZ65100;
XX
XX 21-MAR-2003 (first entry)
XX
XX Human HER2 DNzyme substrate #557.
XX
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
XX Homo sapiens.
OS
XX WO200297114-A2.
PN
```

PD 05-DEC-2002.
XX 29-MAY-2002; 2002WO-US016840.
XX 29-MAY-2001; 2001US-0294140P.
PR 06-JUN-2001; 2001US-0296249P.
PR 10-SEP-2001; 2001US-0318471P.
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX Mcswiggen J;
XX WPI; 2003-140484/13.
XX Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX Claim 4; Page 143; 185pp; English.
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
SQ Sequence 17 BP; 6 A; 5 C; 4 G; 0 T; 2 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 76.5%; Pred. No. 7.3e+02;
Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0;
QY 654 CACCGUUCACAGGCA 670
DB 1 CACAGUUCACAGGCA 17
RESULT 952
ABZ62059/C
ID ABZ62059 standard; RNA; 17 BP.
XX
AC ABZ62059;
XX
DT 21-MAR-2003 (first entry)
XX
DE Human H-Ras DNazyme target #850.
XX
KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
OS Homo sapiens.
XX
XX WO200297114-A2.
XX
XX 05-DEC-2002.
XX
XX 29-MAY-2002; 2002WO-US016840.
XX
XX 29-MAY-2001; 2001US-0294140P.
PR 06-JUN-2001; 2001US-0296249P.
PR 10-SEP-2001; 2001US-0318471P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX Mcswiggen J;
PI

XX WPI; 2003-140484/13.
XX Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX Claim 58; Page 129; 185pp; English.
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
SQ Sequence 17 BP; 1 A; 6 C; 7 G; 0 T; 3 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 7.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1627 GCCCCCACGACGCGCG 1643
DB 17 GCCCCCACGACGCGATG 1
RESULT 953
ACD59940
ID ACD59940 standard; RNA; 17 BP.
XX
AC ACD59940;
XX
DT 24-SEP-2003 (first entry)
XX
DE HCV DNazyme substrate sequence #1574.
XX
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX
OS Hepatitis C virus.
XX
XX WO200281494-A1.
XX
XX 17-OCT-2002.
XX
XX 26-MAR-2002; 2002WO-US009187.
XX
XX 26-MAR-2001; 2001US-00817879.
PR 08-JUN-2001; 2001US-00877478.
PR 08-JUN-2001; 2001US-0296876P.
PR 24-OCT-2001; 2001US-0335059P.
PR 05-DEC-2001; 2001US-0337055P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MACE/) MACEJAK D.
PA (MCSW/) MCSWIGGEN J.
PA (MOR/) MORRISSEY D.
PA (FAVC/) PAVCO P.
PA (LEEP/) LEE P.

PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
XX
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX
DR WPI; 2003-229207/22.
XX
XX Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX
XX Claim 1; Page 262; 387pp; English.
XX
XX The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
CC inozymes, zinzymes, amberyzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HCV
CC DNzyme or minus strand DNzyme sequences disclosed in the present
CC invention
XX
XX Sequence 17 BP; 2 A; 2 C; 11 G; 0 T; 2 U; 0 Other;
SQ
Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 76.5%; Pred. No. 7.3e+02;
Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0;
QY 351 GGGGTCCTGATGGGAGA 367
DB 1 GGGGUCUGGGGGAGA 17
RESULT 954
ACD58066/c
ID ACD58066 standard; RNA; 17 BP.
XX
XX ACD58066;
AC
XX
XX 23-SEP-2003 (first entry)
XX
XX HCV DNzyme substrate sequence #652.
XX
XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
KW amberyzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX
XX Hepatitis C virus.
OS
XX
XX WO200281494-A1.
FN
XX
XX 17-OCT-2002.
PD
XX
XX 26-MAR-2002; 2002WO-US009187.
PF
XX
XX 26-MAR-2001; 2001US-00817879.
PR
XX
XX 08-JUN-2001; 2001US-00877478.
PR

PR 08-JUN-2001; 2001US-0296876P.
PR 24-OCT-2001; 2001US-0335059P.
PR 05-DEC-2001; 2001US-0337055P.
XX
XX (RISO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MACE/) MACEJAK D.
PA (MCSW/) MCSWIGGEN J.
PA (MORR/) MORRISSEY D.
PA (PAVC/) PAVCO P.
PA (LEEP/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
XX
XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
PI WPI; 2003-229207/22.
XX
XX Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX
XX Claim 1; Page 245; 387pp; English.
XX
XX The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
CC inozymes, zinzymes, amberyzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HCV
CC DNzyme or minus strand DNzyme sequences disclosed in the present
CC invention
XX
XX Sequence 17 BP; 2 A; 7 C; 3 G; 0 T; 5 U; 0 Other;
SQ
Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 7.3e+02;
Matches 15; Conservative 2; Mismatches 2; Indels 0; Gaps 0;
QY 1432 GCAGAGGATGCCATGAA 1448
DB 17 GGAGAGGATGCCATGCA 1
RESULT 955
ACD58725/c
ID ACC68725 standard; DNA; 17 BP.
XX
XX ACC68725;
AC
XX
XX 01-JUL-2003 (first entry)
DT
XX
XX Murine oligonucleotide associated with tumour suppression, SEQ ID 5972.
DE
XX
XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
KW tumour suppression; tumour reversion; apoptosis; virus resistance;
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; ss.
XX
XX Mus musculus.
OS
XX
XX WO2003025176-A2.
FN

CC suppression or reversion, apoptosis and or viral resistance, to produce
 CC recombinant polypeptides, and to prepare transgenic animals, as
 CC experimental models. The nucleotides (also vectors containing them and
 CC cells containing the vectors), the encoded polypeptides and antibodies
 CC (Ab) against the polypeptide are useful for prevention and/or treatment
 CC of viral infections or diseases characterized by development of tumours
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
 CC Analysis of the expression of the nucleotides can be used for diagnosis
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can
 CC also be used to screen for their specific interactive molecules,
 CC potentially useful for treating diseases associated with abnormal
 CC expression of the nucleotides.

XX
 SQ Sequence 17 BP; 7 A; 2 C; 6 G; 2 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.8; DB 1; Length 17;
 Best Local Similarity 88.2%; Pred. No. 7.3e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 127 GATCGGATGAAGAGAT 143
 |||||
 Db 1 GATCGGAAGCAGAAGAT 17

RESULT 958

ADC03574
 ID ADC03574 standard; DNA; 17 BP.

XX

AC ADC03574;

DT 18-DEC-2003 (first entry)

XX

DE Human Na/H exchanger-like protein 1 gene oligonucleotide #21.

XX ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;

KW NHEPL1; passive replacement therapy; vaccine; diagnosis.

XX

OS Homo sapiens.

XX

PN EP1273660-A2.

XX

PD 08-JAN-2003.

XX

PF 25-JAN-2002; 2002EP-00001160.

XX

PR 30-JAN-2001; 2001WO-US000666.

XX

PR 23-MAY-2001; 2001US-00864761.

XX

PR 21-DEC-2001; 2001US-0343331P.

XX

XX (AEOM-) AEOMICA INC.

XX

XX Gu Y;

PI

DR WPI; 2003-302724/30.

XX

XX New human sodium-hydrogen exchanger like protein 1 (NHEPL1), useful as a
 PT passive replacement therapy or as a vaccine for treating or preventing
 PT disorders associated with aberrant expression or activity of human
 PT NHEPL1.

XX

PS Example 2; SEQ ID NO 61; 468pp; English.

XX

CC The invention relates to a nucleic acid molecule which encodes a Na⁺/H⁺
 CC exchanger like protein (NHEPL1). The NHEPL1 nucleic acid molecule, NHEPL1
 CC polypeptide, an antibody against the protein or its antigen-binding
 CC fragment is useful in therapy. The NHEPL1 nucleic acid molecule, NHEPL1
 CC polypeptide and an agonist are particularly useful for manufacturing a
 CC medicament for treating or preventing a disorder associated with
 CC decreased expression or activity of human NHEPL1. The antibody or its
 CC antigen-binding fragment, and an antagonist, are useful for manufacturing
 CC a medicament for treating or preventing a disorder associated with
 CC increased expression or activity of human NHEPL1. The NHEPL1 nucleic acid
 CC or protein is useful as passive replacement therapy, as a vaccine, or in

CC diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
 CC spanning the sequence of the human NHEPL1 gene (ADC03514).

XX
 SQ Sequence 17 BP; 7 A; 4 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 17;
 Best Local Similarity 88.2%; Pred. No. 7.3e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1251 TATCTTAGGACCCCA 1267

|||||

Db 1 TATCTAGGATCCCA 17

RESULT 959

AAZ57670/c

ID AAZ57670 standard; DNA; 18 BP.

XX

AC AAZ57670;

XX

DT 05-APR-2000 (first entry)

XX

DE Human G-alpha-12 antisense inhibitor ISIS# 20658.

XX G-alpha-12 inhibitor; antisense compound; cell differentiation; cancer;

KW cell growth; metastatic growth; ss; ISIS# 20658.

XX

OS Homo sapiens.

XX

PN US5998206-A.

XX

PD 07-DEC-1999.

XX

PF 23-FEB-1999; 99US-00256496.

XX

PR 23-FEB-1999; 99US-00256496.

XX

XX (ISIS-) ISIS PHARM INC.

XX

XX Cowsert LM;

PI

XX WPI; 2000-095920/08.

XX

XX Antisense inhibition of human G-alpha-12 expression.

XX

XX Example 15; Col 38; 36pp; English.

XX

PS This is a human G-alpha-12 antisense nucleotide sequence. G-alpha-12 is a
 CC member of the G12/13 subfamily of G-proteins. The primary function of G-
 CC alpha-12 is in cell differentiation and growth. The invention relates to
 CC antisense compounds which are 8-30 nucleotides long (see AAZ57668-
 CC 257746). The antisense molecules are targeted to the human G-alpha-12
 CC nucleic acid molecule, and inhibit the expression of G-alpha-12. The
 CC molecules preferably have a modified internucleotide linkage, and at
 CC least one modified sugar moiety. The compounds target different regions
 CC of the human G-alpha-12 RNA. The expression of human G-alpha 12 is
 CC inhibited by contacting human cells or tissues in vitro with the
 CC antisense molecules. The oligonucleotides are used in modulating the
 CC function of nucleic acid molecules encoding G-alpha-12, ultimately
 CC modulating the amount of G-alpha-12 produced. The antisense compounds can
 CC be utilized for diagnostics, therapeutics, prophylaxis and as research
 CC agents and kits. They may be useful in the treatment of cancer, and
 CC metastatic growth

XX

XX Sequence 18 BP; 4 A; 4 C; 9 G; 1 T; 0 U; 0 Other;

XX

XX Query Match 0.8%; Score 13.8; DB 1; Length 18;

XX Best Local Similarity 88.2%; Pred. No. 7.8e+02;

XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

XX

QY 555 CCTCAGCCGCGCTCC 571

|||||

Db 18 CCTCAGCCGCTGCTGC 2

RESULT 960
 AAQ03964
 ID AAQ03964 standard; DNA; 18 BP.
 XX
 AC AAQ03964;
 XX
 DT 22-AUG-1990 (first entry)
 XX
 DE Herpes simplex virus replication inhibitor 294.
 XX
 KW Herpes simplex virus; HSV; herpes; transactivating protein; TAP; ss.
 XX
 OS Synthetic.
 XX
 FN EP363059-A.
 XX
 PD 11-APR-1990.
 XX
 PF 26-SEP-1989; 89EP-00309754.
 XX
 PR 30-SEP-1988; 88US-00252225.
 XX
 PA (SCHE) SCHERING CORP.
 XX
 PI Draper KG;
 XX
 DR WPI; 1990-109387/15.
 XX
 PT Inhibitor of herpes simplex virus replication - comprising oligomer
 PT complementary to initiation region of mRNA coding for HSV trans-
 PT activating protein.
 XX
 PS Disclosure; Fig 1; 17pp; English.
 XX
 CC Oligomer hybridises to the transactivating protein region of the HSV
 CC genome blocking successful replication. Useful in prevention and
 CC treatment of infected cells
 XX
 SQ Sequence 18 BP; 4 A; 3 C; 7 G; 4 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.8; DB 1; Length 18;
 Best Local Similarity 88.2%; Pred. No. 7.8e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 505 GAGGGCTACCTGGAGAA 521
 Db 1 GGGGTTACTCGAGAA 17
 RESULT 961
 AAT11975/c
 ID AAT11975 standard; DNA; 18 BP.
 XX
 AC AAT11975;
 XX
 DT 25-MAR-2003 (revised)
 XX
 DT 13-MAR-1996 (first entry)
 XX
 DE CMV antisense oligonucleotide (ISIS 5479).
 XX
 KW antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis;
 KW intermediate early complex; IE1; IE2; DNA polymerase gene; ss.
 XX
 OS Synthetic.
 XX
 FN Key Location/Qualifiers
 FN modified_base 1..18
 FT /tag= a
 FT /note= "Phosphorothioate backbone"
 XX
 PN US5442049-A.

XX 15-AUG-1995.
 PD
 XX 25-JAN-1993; 93US-00009263.
 PF
 XX 19-NOV-1992; 92US-00927506.
 PR
 XX (ISIS-) ISIS PHARM INC.
 PA
 XX Baker B, Draper K, Anderson K;
 PI
 XX WPI; 1995-292538/38.
 DR
 XX New oligo-nucleotide inhibits cytomegalovirus replication - by binding to
 PT a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and
 PT treatment of CMV diseases.
 XX
 PS Example 10; Col 17; 66pp; English.
 XX
 CC AAT11971-84 are antisense oligonucleotides (ONs) against human
 CC cytomegalovirus (CMV) that displayed activities of at least 50 % of
 CC control (ISIS 2922 shown in AAT11961). It was found that up to 4 internal
 CC mismatches could be tolerated without loss of antiviral activity.
 CC Antisense ONs targeting CMV DNA or RNA coding for the IE1, IE2 or DNA
 CC polymerase proteins have been shown to be effective in therapy,
 CC prophylaxis and diagnosis of CMV infection. The ONs may be modified to
 CC reduce nuclease resistance and to increase their efficacy. Modifications
 CC include phosphorothioate backbones, alkyl and halogen-substituted sugar
 CC moieties at the 2' position. (Updated on 25-MAR-2003 to correct PF
 CC field.)
 XX
 SQ Sequence 18 BP; 0 A; 5 C; 3 G; 10 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.8; DB 1; Length 18;
 Best Local Similarity 88.2%; Pred. No. 7.8e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 133 ATGAGAGAGATCAAAACG 149
 Db 18 AAGAGAGAGAGCAAAACG 2
 RESULT 962
 AAT01677/c
 ID AAT01677 standard; DNA; 18 BP.
 XX
 AC AAT01677;
 XX
 DT 17-DEC-1995 (first entry)
 XX
 DE Peptide nucleic acid targeting CMV IE2 nuc sig 2.
 XX
 KW peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;
 KW antiviral; diagnostic; ss.
 XX
 OS Synthetic.
 XX
 FN Key Location/Qualifiers
 FN misc_feature 1..18
 FT /tag= a
 FT /note= "at least one (and preferably all) of the backbone
 FT subunits are composed of amide units, so that the
 FT oligomer consists of the nucleobases attached covalently
 FT to a polyamide backbone"
 XX
 PN WO9504748-A1.
 XX
 PD 16-FEB-1995.
 XX
 PF 09-AUG-1994; 94WO-US009039.
 XX
 PR 09-AUG-1993; 93US-00104438.
 XX

PA (ISIS-) ISIS PHARM INC.
 XX Anderson KP, Crooke ST, Mirabelli CK, Ecker DJ, Cowseert LM;
 XX WPI; 1995-090841/12.
 XX New peptide nucleic acid oligomers hybridisable to cytomegalovirus or
 PT papilloma-virus - are stable anti-sense molecules with high affinity for
 PT single stranded DNA, used for treating infections.
 XX Claim 2; Page 44; 65pp; English.
 XX New oligomers are claimed which (A) have at least one peptide nucleic
 CC acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, 5'
 CC untranslated region, intron/exon (I/E) junction or coding sequence of
 CC cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or
 CC hybridisable to the E, E2, E4, E5, E6, E7, I1 or I2 reading frames of a
 CC papillomavirus. The PNAs can be used to target RNA and single stranded
 CC DNA (ssDNA) to produce antisense-type gene regulation moieties. Hence
 CC they may be used therapeutically for modulating cytomegalovirus and
 CC papillomavirus processes and also as diagnostics (e.g., as probes for
 CC specific mRNAs). PNA oligomers have high affinity for complementary
 CC single stranded DNA. They are also able to form triple helices in which a
 CC first PNA strand binds with RNA or ssDNA and a second PNA strand binds
 CC with the resulting double helix or with the first PNA strand. The PNAs
 CC possess no significant charge and are water soluble, which facilitates
 CC cellular uptake. Further, since they contain amides of non-biological
 CC amino acids, they are biostable and resistant to enzymatic degradation by
 CC proteases. The present sequence targets CMV IE2 nuclear localisation
 CC signal 2
 XX Sequence 18 BP; 0 A; 5 C; 3 G; 10 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 13.8; DB 1; Length 18;
 Best Local Similarity 88.2%; Pred. No. 7.8e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 133 ATGAGAGAGATCAACG 149
 DB 18 AAGAGAGAGAGCAACG 2
 RESULT 963
 AAX73494
 ID AAX73494 standard; RNA; 18 BP.
 AC AAX73494;
 XX 28-JUL-1999 (first entry)
 DT Mouse flk-1 VEGF receptor hairpin ribozyme substrate #41.
 DE Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
 KW KDR; hamsterhead ribozyme; hairpin ribozyme; cleavage;
 KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
 KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
 KW foetal liver kinase 1; ss.
 OS Mus sp.
 XX WO9715662-A2.
 FN 01-MAY-1997.
 PD 25-OCT-1996; 96WO-US017480.
 XX 26-OCT-1995; 95US-0005974P.
 PR 11-JAN-1996; 96US-00584040.
 XX (RIBO-) RIBOZYME PHARM INC.
 PA (CHIR) CHIRON CORP.
 XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;

XX WPI; 1997-259017/23.
 XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
 PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
 PT rheumatoid arthritis, etc., in a human patient.
 XX Claim 4; Page 152; 218pp; English.
 XX The present invention describes nucleic acid molecules which modulate the
 CC synthesis, expression and/or stability of a mRNA encoding 1 or more
 CC receptors of vascular endothelial growth factor (VEGF). A patient
 CC (preferably human) having a condition associated with the level of the
 CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
 CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
 CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
 CC treated by administering the nucleic acid molecule or the expression
 CC vector to the patient. AAX67275 to AAX75752 represent specific examples
 CC of nucleic acid molecules from the present invention
 XX Sequence 18 BP; 1 A; 6 C; 7 G; 0 T; 4 U; 0 Other;
 SQ Query Match 0.8%; Score 13.8; DB 1; Length 18;
 Best Local Similarity 70.6%; Pred. No. 7.8e+02;
 Matches 12; Conservative 3; Mismatches 2; Indels 0; Gaps 0;
 QY 1033 GACTTGTGCGCTGCGCCG 1049
 DB 1 GACUUCGCGUUGGCCCG 17
 RESULT 964
 AAV47637
 ID AAV47637 standard; DNA; 18 BP.
 AC AAV47637;
 XX 25-MAR-2003 (revised)
 DT 08-DEC-1998 (first entry)
 XX Primer 1, located in exon 3 and 4 of VEGF-B.
 DE Primer; amplification; PCR; mouse; VEGF-B; allele; F2 offspring;
 KW cysteine residue; intramolecular disulphide bond; transgenic animal; ss.
 OS Synthetic.
 OS Mus sp.
 XX WO9836052-A1.
 XX 20-AUG-1998.
 PD 18-FEB-1998; 98WO-US003212.
 XX 18-FEB-1997; 97US-0038202P.
 PR (LUDW-) LUDWIG INST CANCER RES.
 PA Von Euler G, Aase K, Betsholtz C, Eriksson U, Pekny M;
 PI Gebre-Medhin S, Li X;
 XX WPI; 1998-457107/39.
 XX Transgenic non-human animals - which contain cells with modified vascular
 PT endothelial growth factor B gene for use in diagnostic and therapeutic
 PT studies.
 XX Example 4; Page 22; 45pp; English.
 XX Primers AAV47637 and AAV47638 were used to amplify the wildtype VEGF-B
 CC allele from tail DNA from F2 offspring, and can be located to exon 3 and
 CC exon 4 of the mouse VEGF-B gene. F2 mice that contain the wild-type
 CC allele were found to produce an amplified fragment of 316 bp upon PCR

CC with these primers, however mutant alleles will not be amplified by these
 CC primers, due to most of exon 3 and all of exon 4 having been completely
 CC deleted. These mutant mice produce a non-functional protein because the
 CC deletion removes 7 out of the 8 cysteine residues, thus disrupting
 CC intramolecular disulphide bonds. The transgenic animals can be used in
 CC elucidating the effects of VEGF-B on physiological phenomena such as
 CC permeability, inflammation and/or tissue repair. (Updated on 25-MAR-2003
 CC to correct FI field.)

XX Sequence 18 BP; 2 A; 5 C; 6 G; 5 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 13.8; DB 1; Length 18;
 Best Local Similarity 88.2%; Pred. No. 7.8e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 47 GACCAGCGTGTGACTG 63
 Db 1 GCCCAGCTGTGTGACTG 17

RESULT 965

AAV53112
 ID AAV53112 standard; DNA; 18 BP.

AC AAV53112;

DT 12-NOV-1998 (first entry)

DE MHC class II Eα promoter CPRE sequence (-3 to +14 basepairs).

XX CP2 recognition element; IL4; promoter; asthma; therapeutic composition;
 KW CP2 function effector; Th1/Th2 cell balance regulation; immune response;
 KW immunological disease; allergic rhinitis; allergic conjunctivitis; CPRE;
 KW dermatitis; urticaria; multiple sclerosis; arthritis; malignancy;
 KW type 1 diabetes mellitus; parasitic infection; immunodeficient disorder;
 KW T helper cell response; viral antigen; ss.

XX Homo sapiens.

OS WO9836641-A1.

PN 27-AUG-1998.

PD 19-FEB-1998; 98WO-US003049.

XX 20-FEB-1997; 97US-0037972P.

PR (SCHE-) SCHEPENS EYE RES INST INC.
 PA (JOHN-) JOHNS HOPKINS SCHOOL MEDICINE.
 PA (SLOK) SLOAN KETTERING INST CANCER RES.

XX Ono SJ, Casolaro V, Sheffery M, Swendeman SL;

PI WPI; 1998-467194/40.

XX Use of effector(s) of CP2 function - for modulating immune responses for
 XX treating e.g. allergies, auto-immune disease, infections,
 XX immunodeficiency disorders or malignancies.

XX Claim 8; Fig 4D; 58pp; English.

XX Sequences shown in AAV53107 to AAV53114 represent oligonucleotides
 CC homologous to the CP2 recognition element (CPRE) region and can interfere
 CC with CP2/ CPRE interaction. These oligonucleotides are inhibitors of CP2
 CC function and can be used in a therapeutic composition of the invention. A
 CC method of screening for such a CP2 function effector comprises providing
 CC first and second samples of components for an assay for complex formation
 CC between CP2 and a CPRE in the human IL4 promoter and causing the first
 CC sample of components to react in the assay, where the extent of complex
 CC formation between CP2 and a CPRE in the human IL4 promoter in the first
 CC assay sample is determined. A candidate effector is added to the second
 CC sample of components which is then caused to react in the assay, and the
 CC extent of complex formation between CP2 and a CPRE in the human IL4

CC promoter in the second assay sample is determined. The extent of complex
 CC formation between the two assay samples is compared to determine the
 CC effect of the candidate effector. The therapeutic composition comprising
 CC the effector is used for the interruption or enhancement of CP2 activity
 CC and thus regulation of Th1/Th2 cell balance, for therapeutic control of
 CC the immune response and immunological disease in a variety of conditions
 CC including allergic rhinitis, allergic conjunctivitis, asthma, dermatitis,
 CC urticaria, multiple sclerosis, type 1 diabetes mellitus, arthritis and
 CC parasitic infection. CP2 or dominant negative CP2 may also be useful in
 CC the management of immunodeficient disorders or malignancies by amplifying
 CC T helper cell responses to viral antigen

XX Sequence 18 BP; 2 A; 6 C; 4 G; 6 T; 0 U; 0 Other;

SQ Query Match 0.8%; Score 13.8; DB 1; Length 18;

Best Local Similarity 88.2%; Pred. No. 7.8e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1456 TTCTTCCTCAGTCTGGG 1472

Db 1 TTCTGCCTCAGTCTGGG 17

RESULT 966

AAAX17892/C

ID AAAX17892 standard; DNA; 18 BP.

XX AAAX17892;

DT 11-MAY-1999 (first entry)

DE Anti-CMV oligonucleotide #5479.

XX Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;
 KW cytomegalovirus; inhibition; replication; sugar modification;
 KW phosphorothioate; infection; retinitis; ss.

XX Synthetic.

OS Human herpesvirus 5.

PN WO9845314-A1.

XX 15-OCT-1998.

PD 07-APR-1998; 98WO-US006895.

XX 09-APR-1997; 97US-00838715.

PR (ISIS-) ISIS PHARM INC.

PA Draper KG, Kisner DL, Anderson KP, Chapman S;

PI WPI; 1998-568330/48.

XX New antisense oligonucleotides that target cytomegalovirus nucleic acid -
 XX particularly including 2-methoxyethoxy sugar modifications, especially
 XX for treating viral retinitis, with long-lasting retention in the retina.

XX Claim 7; Page 30; 99pp; English.

XX Antisense oligonucleotides (AAAX17861-X17924) are targeted to a nucleic
 CC acid (AAAX17925-X17948) encoding IE (immediate early) 1 or 2, or DNA
 CC polymerase of cytomegalovirus (CMV) and are able to inhibit CMV
 CC replication. Optionally the oligonucleotides include at least one 2'-(2-
 CC methoxyethoxy) sugar modification or phosphorothioate internucleotide
 CC linkages. The oligonucleotides are used to inhibit CMV infections (by in
 CC vivo or in vitro contact with cells, tissues or body fluids), especially
 CC to treat or prevent CMV infections, particularly retinitis

XX Sequence 18 BP; 0 A; 5 C; 3 G; 10 T; 0 U; 0 Other;

SQ Query Match 0.8%; Score 13.8; DB 1; Length 18;

Best Local Similarity 88.2%; Pred. No. 7.8e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 133 ATGAGAGAGATCAACG 149
DB 18 AAGAGAGAGAGCAACG 2

RESULT 967
AAZ41129/c
ID AAZ41129 standard; DNA; 18 BP.
XX
AC AAZ41129;
XX
XX
DT 26-JAN-2000 (first entry)
XX
DE Human G-alpha-11 phosphorothioate antisense oligonucleotide #33.
XX
KW Identification; genetic target; gene modulation; human; probe;
KW antisense oligonucleotide; phosphorothioate; PCR primer;
KW nucleotide sequence-based technology; antisense drug discovery;
KW target validation; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
BN W09953101-A1.
XX
PD 21-OCT-1999.
XX
XX 13-APR-1999; 99WO-US008268.
XX
XX 13-APR-1998; 98US-0081483P.
PR 28-APR-1998; 98US-00067638.
XX
XX (ISIS-) ISIS PHARM INC.
PA
PI Cowsext LM, Baker BF, McNeil J, Freier SM, Sasmore HM, Brooks DG;
PI Ohasi C, Wyatt JR, Borchers AH, Vickers TA;
XX
DR WPI; 1999-620446/53.
XX
PT Identifying compounds which modulate expression of nucleic acids, used to
PT provide compounds having defined physical, chemical or bioactive
PT properties, e.g. antisense activity.
XX
PS Example 27; Page 108; 264pp; English.
XX
CC A method has been developed of defining a set of compounds that modulate
CC the expression of a target nucleic acid (tNA) sequence via binding of the
CC compounds with the tNA sequence. The method comprises generating a
CC library of virtual compounds in silico according to defined criteria, and
CC evaluating in silico the binding of the virtual compounds with the tNA
CC according to defined criteria. Also described are: (1) a method of
CC defining a set of oligonucleotides (ONs) that modulate the expression of
CC a tNA sequence via binding of the ONs with the tNA sequence comprising
CC generating a library of virtual compounds in silico according to defined
CC criteria, and evaluating in silico the binding of the virtual ONs with
CC the tNA according to defined criteria; and (2) a method of defining a set
CC of compounds that modulate the expression of a tNA sequence via binding
CC of the compounds with the tNA. The methods can be used for the generation
CC and identification of synthetic compounds having defined physical,
CC chemical or bioactive properties. Information gathered from assays of
CC such compounds is used to identify nucleic acid sequences that are
CC tractable to a variety of nucleotide sequence-based technologies, e.g.
CC antisense drug discovery and target validation. AAZ40852 to AAZ41220, and
CC AAY52701 to AAY52706, represent sequences used in the exemplification of
CC the present invention
XX
SQ Sequence 18 BP; 2 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 7.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 512 ACCTGGAGAGCTGACC 528
DB 17 ACGTGGAGAGCTGACC 1

RESULT 968
AAZ31599/c
ID AAZ31599 standard; DNA; 18 BP.
XX
AC AAZ31599;
XX
XX
DT 13-JAN-2000 (first entry)
XX
DE Human IKB-Beta antisense inhibitor ISIS# 23583.
XX
KW Inhibitor-kappa B kinase-beta; IKB-beta; human; T-cell leukaemia; asthma;
KW inflammatory response; inflammatory disease; juvenile diabetes mellitus;
KW Graves' disease; rheumatoid arthritis; allograft rejection; diagnosis;
KW inflammatory bowel disease; multiple sclerosis; contact dermatitis;
KW rhinitis; allergy; hyperproliferative disorder; tumour; therapy;
KW antisense inhibitor; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
BN USS977341-A.
XX
PD 02-NOV-1999.
XX
XX 20-NOV-1998; 98US-00197008.
XX
XX 20-NOV-1998; 98US-00197008.
XX
XX (ISIS-) ISIS PHARM INC.
XX
PI Monia BP, Cowsext LM;
XX
DR WPI; 1999-619715/53.
XX
PT Antisense oligonucleotides inhibiting human Inhibitor-kappa B Kinase-
PT beta, useful for treating conditions such as inflammation, asthma,
PT diabetes, allograft rejection, allergies, hyperproliferative disorders or
PT tumours.
XX
PS Claim 11; Col 40; 32pp; English.
XX
CC This sequence represents an antisense oligonucleotide (I) of the
CC invention. (I) are 8 to 30 nucleotides in length and inhibit the
CC expression of human Inhibitor-kappa B kinase-beta (IKB-beta). (I)
CC inhibits the expression of human IKB-beta which plays a role in the
CC development of T-cell leukaemia and in the activation of inflammatory
CC responses. (I) is therefore useful for treating inflammatory diseases or
CC disorders with an inflammatory component such as asthma, juvenile
CC diabetes mellitus, Graves' disease, rheumatoid arthritis, allograft
CC rejection, inflammatory bowel disease, multiple sclerosis, contact
CC dermatitis, rhinitis and various allergies, or hyperproliferative
CC disorders such as leukaemias and other tumours. (I) may also be used for
CC detection of the above disorders
XX
SQ Sequence 18 BP; 5 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 7.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 831 CACCCCTGCTTGAGT 847
DB 17 CACCCCTGCTTGAGT 1

RESULT 969
AAZ56422

```

ID AAX56422 standard; DNA; 18 BP.
XX AC AAX56422;
XX DT 22-JUL-1999 (first entry)
XX DE Human Herg-3 PCR primer SEQ ID NO:10.
XX KW Human; erg subfamily; potassium ion channel protein; Herg-2; Herg-3;
XX KW cardiac arrhythmia; long Q-T syndrome; PCR primer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN WO9920760-A2.
XX PD 29-APR-1999.
XX PF 21-OCT-1998; 98WO-US022286.
XX PR 22-OCT-1997; 97US-00956242.
XX PA (WISC ) WISCONSIN ALUMNI RES FOUND.
XX PI Ganetzky BS, Titus SA;
XX PI WPI; 1999-326594/27.
XX DR Novel ion channel genes and proteins useful for identifying homologues
XX PT and screening for therapeutics.
XX PS Example; Page 15; 46pp; English.
XX CC The present sequence represents a PCR primer for Herg-3, a human erg
XX CC subfamily of potassium ion channel protein. The erg genes encode
XX CC potassium ion channel proteins. These proteins are implicated in the
XX CC development of long Q-T syndrome, a rare, but often fatal, cardiac
XX CC arrhythmia. The Herg-2 and -3 proteins can be used to identify modulators
XX CC of the proteins, useful in therapeutics. The nucleic acids can be used
XX CC for screening of homologues
XX SQ Sequence 18 BP; 0 A; 6 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. NO. 7.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 930 GCTGCTCCGTGGCTGG 946
DB 2 GCTGCTCCGTGGCTTG 13

RESULT 970
AAZ19500/C
ID AAZ19500 standard; DNA; 18 BP.
XX AC AAZ19500;
XX DT 15-NOV-1999 (first entry)
XX DE Human G-alpha-11 phosphorothioate antisense oligonucleotide SEQ ID NO:40.
XX KW Human; G-alpha-11; antisense oligonucleotide; inhibition; expression;
XX KW phosphorothioate; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN US5951455-A.
XX PD 14-SEP-1999.
XX PF 04-DEC-1998; 98US-00205922.
XX PR 04-DEC-1998; 98US-00205922.

XX 04-DEC-1998; 98US-00205922.
XX (ISIS-) ISIS PHARM INC.
XX PI Cowseert LM;
XX WPI; 1999-539140/45.
XX PT Inhibitory antisense compounds useful for the treatment of diseases
XX PT associated with G-alpha-11.
XX PS Claim 3; Col 40; 38pp; English.
XX CC The present invention describes inhibitory antisense compounds of 8-30
XX CC nucleotides, targeted to a nucleic acid molecule encoding human G-alpha-
XX CC 11. AAZ19468 to AAZ19547 represent human G-alpha-11 phosphorothioate
XX CC antisense oligonucleotides given in the present invention. The
XX CC oligonucleotides may be useful for the treatment of diseases associated
XX CC with G-alpha-11
XX SQ Sequence 18 BP; 2 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. NO. 7.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 512 ACCTGGAGAGCTGACC 528
DB 17 ACCTGGAGAGCTGACC 1

RESULT 971
AAA74957
ID AAA74957 standard; DNA; 18 BP.
XX AC AAA74957;
XX DT 02-JAN-2001 (first entry)
XX DE PCR primer used to amplify a 316 bp fragment of murine VEGF-B gene.
XX KW VEGF-B; vascular endothelial growth factor-B; heart abnormality;
XX KW ischemia; atrioventricular conduction defect; myocardium; heart disease;
XX KW PCR primer; ss.
XX OS Mus sp.
XX PN WO200052462-A1.
XX PD 08-SEP-2000.
XX PF 03-MAR-2000; 2000WO-US005465.
XX PR 03-MAR-1999; 99US-0160083P.
XX PA (LUDW-) LUDWIG INST CANCER RES.
XX PI Aase K, Thoren P, Eriksson U;
XX WPI; 2000-638114/61.
XX PT Use of vascular endothelial growth factor B deficient animals for
XX PT screening atrioventricular conduction or ischemia modulating compounds,
XX PT and characterization of the biological roles of the growth factor.
XX PS Example 4; Page 31; 58pp; English.
XX CC PCR primers AAA74956-57 were used to amplify a 316 bp fragment from exons
XX CC 3 and 4 of the VEGF (vascular endothelial growth factor)-B. The primers
XX CC were used to analyse VEGF-B deficient transgenic mice. VEGF-B deficient
XX CC animals show heart abnormalities that appear to be caused by
XX CC atrioventricular conduction defects and ischemia of the myocardium. The

```

CC specification describes methods for screening a compound for
 CC atrioventricular conduction or ischemia modulating activity. The method
 CC comprises introducing the compound into a VEGF-B deficient non-human
 CC animal, and assaying the effect on atrioventricular conduction or
 CC ischemia. The methods are used for screening atrioventricular conduction
 CC or ischemia modulating compounds, treatment or alleviation of these
 CC conditions, diagnosis of heart disease characterized by loss of VEGF-B
 CC expression, and detecting or diagnosing VEGF-B deficiency in heart of a
 CC test subject

SQ Sequence 18 BP; 2 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;
 Best Local Similarity 88.2%; Pred. No. 7.8e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 47 GACACGACGTGACTG 63
 DB 1 GCCACGCTGTGACTG 17

RESULT 972
 AAA09733/C
 ID AAA09733 standard; DNA; 18 BP.

AC AAA09733;

DT 23-JUN-2000 (first entry)

DE G-alpha-12 antisense inhibitor oligonucleotide #33 (ISIS #25844).

XX G-alpha-12; antisense inhibitor; infection; inflammation; prevent;
 KW tumour formation; treatment; inhibit; ss.

XX Homo sapiens.

XX US6040179-A.

XX 21-MAR-2000.

XX 25-JUN-1999; 99US-00339993.

XX 25-JUN-1999; 99US-00339993.

XX (ISIS-) ISIS PHARM INC.

XX Cowsert LM;

XX WPI; 2000-270140/23.

XX Novel antisense oligonucleotide containing compounds, useful for
 PT inhibiting the expression of G-alpha-12 in human cells and tissues and
 PT treating infection, inflammation and cancer.

PS Claim 1; Col 41; 31pp; English.

XX This sequence represents an antisense oligonucleotide sequence targeted
 CC to a nucleotide sequence encoding human G-alpha-12. G-alpha-12 is a
 CC member of the Gi subfamily of G proteins, which is involved in hormonal
 CC inhibition of adenylyl cyclase and in the regulation of plasma membrane
 CC enzymes. The expression of G-alpha-12 has been shown to be altered in
 CC some tumours. Mice lacking the G-alpha-12 gene display growth retardation
 CC and develop adenocarcinoma of the colon and a form of lethal diffuse
 CC colitis similar to ulcerative colitis in humans. The antisense molecules
 CC are useful for inhibiting the expression of G-alpha-12 in human cells or
 CC tissues, and for treating and preventing various disorders such as
 CC infection, inflammation and tumour formation. The antisense
 CC oligonucleotides are also useful for research and diagnostic purposes

SQ Sequence 18 BP; 3 A; 9 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;
 Best Local Similarity 88.2%; Pred. No. 7.8e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1636 AGCAGCGCTGAGGG 1652
 DB 17 AGCCTGGCTCTGAGGG 1

RESULT 973
 AAA86683
 ID AAA86683 standard; DNA; 18 BP.

AC AAA86683;

DT 04-DEC-2000 (first entry)

DE Cdc 2 kinase hammerhead ribozyme recognition site #114.

XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.

XX Mammalia.

XX WO200032765-A2.

XX 08-JUN-2000.

XX 06-DEC-1999; 99WO-US028772.

XX 04-DEC-1998; 98US-0110954P.

XX (IMMU-) IMMUSOL INC.

XX Tritz R, Welch PJ, Barber JR, Robbins JM;

XX WPI; 2000-412314/35.

XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
 PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
 PT PCNA and Cyclin B1.

XX Example 1; Page 21; 109pp; English.

XX The present invention relates to a hairpin or hammerhead ribozyme,
 CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
 CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
 CC Representative examples of ribozyme recognition sites are given in
 CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
 CC inhibiting restenosis by introduction of the ribozyme into cells. The
 CC ribozyme is resistant to endonuclease activity and hence is efficient in
 CC restenosis treatment

SQ Sequence 18 BP; 2 A; 5 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;
 Best Local Similarity 88.2%; Pred. No. 7.8e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1036 TTTCGCTGCGCGAGC 1052
 DB 1 TTTCGCTGCGCGAGC 17

RESULT 974

AAZ57669/C

ID AAZ57669 standard; DNA; 18 BP.

AC AAZ57669;

DT 05-APR-2000 (first entry)

XX Human G-alpha-12 antisense inhibitor ISIS# 20657.

XX G-alpha-12 inhibitor; antisense compound; cell differentiation; cancer;
 KW cell growth; metastatic growth; ss; ISIS# 20657.

XX OS Homo sapiens.
 XX PN US9998206-A.
 XX PD 07-DEC-1999.
 XX PF 23-FEB-1999; 99US-00256496.
 XX PR 23-FEB-1999; 99US-00256496.
 XX PA (ISIS-) ISIS PHARM INC.
 XX PI Cowser LM;
 XX WPI; 2000-095920/08.
 XX Antisense inhibition of human G-alpha-12 expression.
 XX Example 15; Col 38; 36pp; English.
 XX This is a human G-alpha-12 antisense nucleotide sequence. G-alpha-12 is a member of the G12/13 subfamily of G-proteins. The primary function of G-alpha-12 is in cell differentiation and growth. The invention relates to antisense compounds which are 8-30 nucleotides long (see AA257668-257746). The antisense molecules are targeted to the human G-alpha-12 nucleic acid molecule, and inhibit the expression of G-alpha-12. The molecules preferably have a modified internucleotide linkage, and at least one modified sugar moiety. The compounds target different regions of the human G-alpha-12 RNA. The expression of human G-alpha 12 is inhibited by contacting human cells or tissues in vitro with the antisense molecules. The oligonucleotides are used in modulating the function of nucleic acid molecules encoding G-alpha-12, ultimately modulating the amount of G-alpha-12 produced. The antisense compounds can be utilized for diagnostics, therapeutics, prophylaxis and as research agents and kits. They may be useful in the treatment of cancer, and metastatic growth
 XX Sequence 18 BP; 2 A; 5 C; 9 G; 2 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.8; DB 1; Length 18;
 Best Local Similarity 88.2%; Pred. No. 7.8e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 552 GCCCTTCAGCCGCGCC 568
 DB 17 GACCTTCAGCCGCTGCC 1
 RESULT 975
 AA256415
 ID AA256415 standard; DNA; 18 BP.
 AC AA256415;
 XX 17-MAR-2000 (first entry)
 DT Escherichia coli H7 specific fliC oligonucleotide primer #1696.
 DE Flagellin; fliC; antigen; detection; PCR primer; ss.
 XX Escherichia coli.
 OS WO9961458-A1.
 PN 02-DEC-1999.
 PD 21-MAY-1999; 99WC-AU000385.
 XX 21-MAY-1998; 98AU-00003634.
 XX (UNSY) UNIV SYDNEY.
 PA Novel antisense compounds useful for inhibiting the expression of human 3

PI Reeves PR, Wang L;
 XX WPI; 2000-072598/06.
 XX Novel nucleic acid molecule useful for the detection of flagellated bacterial strains in food, feces, etc.
 PT Disclosure; Page 43; 245pp; English.
 XX AA256331 to AA256398 represent nucleic acid molecules (I) encoding all or part of an Escherichia coli flagellin protein except a protein expressed by E. coli H₁, H₇, H₁₂ or H₄₈ type strains. The present invention also describes a method of detecting the presence of E. coli of a particular H serotype in a sample, comprising specifically hybridising a nucleic acid, preferably at least a pair, derived from a flagellating gene, specific for a particular flagellin gene associated with the H serotype, to any E. coli in the sample which contain the gene, and detecting any hybridised molecules, identifying the presence of that serotype in the sample. (I) are useful for: (1) detecting the presence of E. coli of H serotype in a sample by hybridising at least one or a pair of (I) to any E. coli in the sample and detecting the hybridised nucleic acid molecules; and (2) for detecting the presence of both O and H-serotypes of E. coli by hybridising at least one or a pair of (I) to any E. coli present in the sample and detecting the hybridised nucleic acid molecules. (I) is particularly useful for detecting the combination of O and H antigen. Hybridised (I) when using at least one (I) is detected by southern blot analysis and, when using a pair of (I), is detected by polymerase chain reaction (PCR). AA256399 to AA256420 represent primers used in the exemplification of the present invention
 XX Sequence 18 BP; 2 A; 7 C; 7 G; 2 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.8; DB 1; Length 18;
 Best Local Similarity 88.2%; Pred. No. 7.8e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1566 GCCTGACTCAGCGCGCC 1582
 DB 2 GCCTGACTCAGCGCGCC 18
 RESULT 976
 AAC60641/c
 ID AAC60641 standard; DNA; 18 BP.
 AC AAC60641;
 XX 01-FEB-2001 (first entry)
 DT Human PDK-1 antisense oligonucleotide ISIS #29246.
 DE Human; PDK-1; 3-phosphoinositide dependent protein kinase-1;
 XX antisense oligonucleotide; phosphorothioate; antiinflammatory;
 KW cytostatic; antimicrobial; ss.
 XX Homo sapiens.
 OS Synthetic.
 PN US6124272-A.
 XX 26-SEP-2000.
 PD 09-APR-1999; 99US-00289466.
 XX 09-APR-1999; 99US-00289466.
 PR (ISIS-) ISIS PHARM INC.
 PA Monia BP, Cowser LM;
 PI WPI; 2000-611015/58.
 XX Novel antisense compounds useful for inhibiting the expression of human 3

PT -Phosphoinositide dependent protein kinase-1, useful e.g. for treating
XX inflammation, tumors and infections.

XX Claim 3; Col 39; 41pp; English.

XX The present sequence is one of a large number of antisense
CC oligonucleotides which are targeted to a nucleic acid molecule encoding
CC human 3-phosphoinositide dependent protein kinase-1 (PDK-1). The
CC antisense compounds may be oligodeoxynucleotides or chimeric
CC oligonucleotides containing a central gap region, consisting of ten 2'-
CC deoxynucleotides, which is flanked on both sides by 2'-methoxyethyl (2'-
CC MOE) wings. The oligonucleotides have a phosphorothioate backbone. The
CC antisense oligonucleotides are useful for inhibiting the expression of
CC human PDK-1 in human cells or tissues. They are also useful for
CC preventing or delaying infection, inflammation or tumors and are useful
CC for research and diagnostics

XX SQ Sequence 18 BP; 3 A; 5 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 7.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 812 TCCACACGGAGAGTCC 828
DB 17 TGCTCAGGAGAGTCC 1

RESULT 977

AAF56289/C

ID AAF56289 standard; DNA; 18 BP.

XX AC AAF56289;

XX 18-APR-2001 (first entry)

XX Primer #4.

XX Parthenocarp; plant; DefH9-iaaM; rolA; regulation; ss.

XX Synthetic.

XX WO200105985-A1.

XX 25-JAN-2001.

XX 13-JUL-2000; 2000WO-IT000290.

XX 16-JUL-1999; 99IT-RM0000451.

XX (GINE-) GINESTRA SCARL.

XX (SPER-) IST SPERIMENTALE ORTICOLTURA.

XX (CNR) CONSIGLIO NAZ DELLE RICERCHE.

XX Spena A, Rotino G, Ficcacanti N, Defez R;

XX WPI; 2001-147350/15.

XX Use of DNA fragment of specified length to modulate the expression of
PT genes that induce the parthenocarpic trait in plants, by inserting the
PT DNA fragment at the 5' end transcribed untranslated region of the gene.

XX Disclosure; Page 11; 29pp; English.

XX The present invention relates to use of a DNA fragment comprising a
CC sequence of 86 nucleotides fully defined in the specification, or its
CC functional analogs, for regulating the expression of a gene that induces
CC parthenocarp in a plant, by inserting the fragment at the 5' end
CC transcribed untranslated region of the gene. The invention is useful for
CC transgenic plant production which do not show any malformations caused by
CC the use of gene DefH9-iaaM in some species and cultivars, and for
CC regulating the gene that induces parthenocarp in a plant

SQ Sequence 18 BP; 3 A; 10 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 7.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1592 GCGTGGTGACACCGAG 1608
DB 17 GTGTGGTGACACCGAG 1

RESULT 978

AAF56287/C

ID AAF56287 standard; DNA; 18 BP.

XX AC AAF56287;

XX 18-APR-2001 (first entry)

XX Primer #2.

XX Parthenocarp; plant; DefH9-iaaM; rolA; regulation; ss.

XX Synthetic.

XX WO200105985-A1.

XX 25-JAN-2001.

XX 13-JUL-2000; 2000WO-IT000290.

XX 16-JUL-1999; 99IT-RM0000451.

XX (GINE-) GINESTRA SCARL.

XX (SPER-) IST SPERIMENTALE ORTICOLTURA.

XX (CNR) CONSIGLIO NAZ DELLE RICERCHE.

XX Spena A, Rotino G, Ficcacanti N, Defez R;

XX WPI; 2001-147350/15.

XX Use of DNA fragment of specified length to modulate the expression of
PT genes that induce the parthenocarpic trait in plants, by inserting the
PT DNA fragment at the 5' end transcribed untranslated region of the gene.

XX Disclosure; Page 11; 29pp; English.

XX The present invention relates to use of a DNA fragment comprising a
CC sequence of 86 nucleotides fully defined in the specification, or its
CC functional analogs, for regulating the expression of a gene that induces
CC parthenocarp in a plant, by inserting the fragment at the 5' end
CC transcribed untranslated region of the gene. The invention is useful for
CC transgenic plant production which do not show any malformations caused by
CC the use of gene DefH9-iaaM in some species and cultivars, and for
CC regulating the gene that induces parthenocarp in a plant

XX SQ Sequence 18 BP; 3 A; 10 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 7.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1592 GCGTGGTGACACCGAG 1608
DB 17 GTGTGGTGACACCGAG 1

RESULT 979

AAS09667

ID AAS09667 standard; DNA; 18 BP.

XX AC AAS09667;

XX

DT 24-OCT-2001 (first entry)
XX Oat Beta-amyrin synthase PCR primer ASEQ2.
DE Oat; PCR primer; Beta-amyrin synthase; triterpenoid; palatability;
XX oxidosqualene cyclase; pathogen resistance; transgenic plant;
KW fungal disease; ss.
KW Avena strigosa.
OS WO200146391-A2.
XX 28-JUN-2001.
XX 20-DEC-2000; 2000WO-GB004908.
PF 22-DEC-1999; 99GB-00030394.
XX 16-AUG-2000; 2000GB-00020217.
XX (PLAN-) PLANT BIOSCIENCE LTD.
PA Osbourn AE, Haralampidis K, Bryan GT;
XX WPI; 2001-418055/44.
XX Novel beta-amyrin synthase encoding nucleic acids useful for influencing
PT or affecting triterpene synthesis, and hence resistance to fungal
PT pathogen, taste, palatability or nutritional value of plants.
XX Claim 11; Page 63; 69pp; English.
XX The sequence represents a PCR primer used to isolate nucleic acids
CC encoding Oat Beta-amyrin synthase (an oxidosqualene cyclase). Beta-amyrin
CC is a triterpenoid responsible for palatability to animals and resistance to
CC pathogens and predators. The beta-amyrin synthase encoding nucleic acid
CC is useful for producing a transgenic plant, by introducing a vector
CC containing it into a host cell, optionally causing or allowing
CC recombination between the vector and the host cell genome so as to
CC transform the host cell, and regenerating a plant from the transformed
CC plant cell. The DNA is also useful for identifying, cloning or
CC determining the presence of a nucleic acid in a sample and for
CC influencing or affecting the quantity or quality of triterpenoid
CC synthesis, preferably an oleanane-type triterpene saponin synthesis, in a
CC plant, such as altering resistance to a fungal pathogen e.g., an
CC ascomycete having a sterol-containing membrane, optionally selected from
CC Gaemannomyces graminis vars tritici and avenae, Fusarium culmorum, F.
CC avenaceum, Stagonospora nodorum or S. avenae, taste, palatability and/or
CC nutritional value of the plant, by causing or allowing expression of the
CC DNA within the cells of the plant, following an earlier step of
CC introducing the DNA into a cell or its ancestor. The DNA is also useful
CC for reducing the level of triterpenoids in the plant, by causing or
CC allowing transcription from an antisense molecule in the plant, allowing
CC transcription from the DNA, or its part such as to reduce beta-amyrin
CC synthase expression by co-suppression, use of a nucleic acid encoding a
CC ribozyme specific for the DNA
XX
SQ Sequence 18 BP; 4 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 7.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1079 CCATGAGTGGTGGACA 1095
DB 2 CCCATGAGTGGTGCACA 18
RESULT 980
AAS95078
ID AAS95078 standard; DNA; 18 BP.
XX AAS95078;
XX

DT 13-FEB-2002 (first entry)
XX Human otoferlin exon PCR primer #43.
DE Human; mouse; otoferlin; OTOF; brain; auditory function; PCR primer;
XX autosomal nonsyndromic prelingual deafness; DFNB9; ss.
KW Homo sapiens.
OS WO200170972-A2.
XX 27-SEP-2001.
XX 23-MAR-2001; 2001WO-IB000578.
PF 24-MAR-2000; 2000US-0191738P.
XX (INSP) INST PASTEUR.
XX (CNRS) CNRS CENT NAT RECH SCI.
PA Yasunaga S, Grati M, Cohen-Salmon M, El Amraoui A, Petit C;
PI Weil D;
XX WPI; 2001-611499/70.
XX Novel human gene Otoferlin, underlying an autosomal recessive
PT nonsyndromic prelingual deafness, DFNB9, and proteins encoded by the
PT gene, implicated in deafness.
XX Claim 25; Page 17; 99pp; English.
XX The invention relates to a purified polynucleotide (I) encoding a protein
CC sequence (II) encoded by a novel human gene, otoferlin (OTOF) or the long
CC human otoferlin isoform in brain. (I) was identified as underlying an
CC autosomal nonsyndromic prelingual deafness DFNB9, and is thus useful for
CC detecting deafness disease in humans and for characterising the functions
CC of proteins and genes encoding them in auditory function. AAS95022-
CC AAS95248 represent human and mouse otoferlin coding sequences, PCR
CC primers and related sequences of the invention
XX
SQ Sequence 18 BP; 4 A; 8 C; 3 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 7.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 479 CACTACCAGCTGCATC 495
DB 2 CACGACCAGCTGTCATC 18
RESULT 981
AAF79533
ID AAF79533 standard; DNA; 18 BP.
XX AAF79533;
XX AAF79533;
XX 29-MAY-2001 (first entry)
DT Caspase-6 protease cleavage signal nucleotide sequence.
DE Caspase-6; protease; cleavage signal; transgene expression;
XX transgene localisation; sodium iodide symporter; NIS; ds.
KW Unidentified.
XX WO200113106-A1.
XX 22-FEB-2001.
XX 17-AUG-2000; 2000WO-US022566.
PF 17-AUG-1999; 99US-0149168P.
XX

PR 16-AUG-2000; 2000US-00639667.
PR 16-AUG-2000; 2000US-00640198.
PA (MAYO-) MAYO FOUND MEDICAL EDUCATION & RES.
XX Russell SJ, Morris J, Peng K;
XX P-PSDB; AAB73917.
DR WPI; 2001-257548/26.
DR P-PSDB; AAB73917.

XX Monitoring transgene expression and therapeutic peptide production in
PT mammals by detecting marker polypeptides linked to transgenes or
PT therapeutic genes released from cells into extracellular body fluid.
XX
XX Example 11; Page 48; 79pp; English.

XX The present sequence is a self-cleaving linker. It may be used in a
CC method for monitoring expression and/or localisation of a transgene, and
CC production of therapeutic peptide in a mammal. The method involves
CC quantifying or detecting the amount of marker polypeptide and/or sodium
CC iodide symporter (NIS) linked to the product of the transgene or
CC therapeutic gene released from cells into extracellular body fluid, or
CC determining the location of labelled molecules which are transported into
CC the cells bearing the marker peptide. The method provides convenient and
CC effective monitoring of the level and kinetics of expression of
CC transgenes and the tissue-specific distribution of expressed transgenes
CC in cells, tissues, animals or humans without the need for disruptive and
CC expensive sampling methods including surgery. The transgene location can
CC be monitored without adversely affecting the mammal or the cell. The NIS
CC is a self protein and as such does not stimulate a host immune reaction.
CC Furthermore, the NIS functions solely to sequester iodine into a cell.
CC which does not adversely affect normal cellular function or overall cell
CC biology

XX Sequence 18 BP; 3 A; 7 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 7.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1723 CATGTTCACTGCGCCAC 1739
|||||
Db 1 CATGTTCACTGCGCTAC 17

RESULT 982
AAH61849
ID AAH61849 standard; DNA; 18 BP.
XX
XX AAH61849;

XX 10-SEP-2001 (first entry)
XX Cdc 2 kinase hammerhead ribozyme recognition site SEQ ID NO:4273.

XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnery;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytotatic;
KW anipsoiatric; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisticking; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.

XX Homo sapiens.
OS Synthetic.

XX WO200130362-A2.

XX 03-MAY-2001.

PF 26-OCT-2000; 2000WO-US029500.
XX
PR 26-OCT-1999; 99US-0161532P.
XX
PA (IMMU-) IMMUSOL INC.
XX Robbins JM, Tritz R;
XX WPI; 2001-300427/31.
DR

XX Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
XX Disclosure; Page 385; 408pp; English.

XX The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC dermatological, cytotatic, antiseborrheic, antidiabetic, antisticking,
CC ophthalmological, vulnery, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH577 to AAH62099 represent sequences used in the
CC exemplification of the present invention

XX Sequence 18 BP; 2 A; 5 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 7.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1036 TTGGCCTGCGCCGAGC 1052
|||||
Db 1 TTGGCCTGCGCAGAGC 17

RESULT 983
ABA03355
ID ABA03355 standard; DNA; 18 BP.
XX
XX ABA03355;

XX 12-FEB-2002 (first entry)

XX Human clone WA15_li coding sequence probe.

XX Human; clone WA15_li; nutrition; cytokine; cell proliferation; probe;
KW immunomodulatory; cell differentiation; haematopoiesis; tissue growth;
KW chemotactic; chemokinetic; thrombolytic; antiinflammatory; cancer;
KW cytotatic; virucide; antibacterial; fungicide; haematological;
KW vulnery; contraceptive; antiinfertility; haemostatic;
KW tumour inhibition; ss.

XX Homo sapiens.

XX WO200175074-A1.

XX 11-OCT-2001.

XX 30-MAR-2001; 2001WO-US010246.

XX 31-MAR-2000; 2000US-0193769P.

XX PA (GEM) GENETICS INST INC.
XX PI Jacobs K, McCoy JM, Lavallie ER, Collins-Racie LA, Evans C;
XX PI Merberg D, Treacy M;
XX XX WPI; 2001-639364/73.
XX DR New human protein related to the ribonuclease HI large subunit, useful
XX PT for treating, e.g. cancer or inflammation.
XX PS Disclosure; Page 65; 67pp; English.
XX XX The present invention provides the protein and coding sequences of human
XX CC WA15.11. These sequences can be used in nutritional supplements, they may
XX CC have cytokine, cell differentiation, cell proliferation,
XX CC immunomodulatory, anti-inflammatory, haematopoiesis regulating, tissue
XX CC growth, chemotactic, chemokinetic, haemostatic, thrombolytic, tumour
XX CC suppression, and tumour inhibition activities, and they may also be used
XX CC in the treatment of infections, infertility, and cognitive and depressive
XX CC disorders. The present sequence is a probe used to isolate the coding
XX CC sequence of the invention
XX SQ Sequence 18 BP; 6 A; 3 C; 8 G; 1 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 7.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 627 GGACAACTGGCGGAGG 643
DB 2 GGACAACTGGCGGAGG 18
RESULT 984
AA168749
ID AA168749 standard; DNA; 18 BP.
XX AC AA168749;
XX XX 21-JAN-2002 (first entry)
XX DE Human cystatin C derived primer 2.
XX XX Primer; cystatin C; post-operative insertion; bone tumor; vulnery;
XX KW transforming growth factor superfamily; osteopathic; gene therapy;
XX KW bone regeneration; cancer; ss.
XX XX Homo sapiens.
XX XX DE10020125-A1.
XX XX 25-OCT-2001.
XX XX 18-APR-2000; 2000DE-01020125.
XX PF 18-APR-2000; 2000DE-01020125.
XX PR 18-APR-2000; 2000DE-01020125.
XX XX (UYJE) UNIV SCHILLER JENA.
XX PA Wiederanders B, Maubach G;
XX PI WPI; 2002-018650/03.
XX DR Agent for stimulating bone regrowth, useful as insert after surgery for
XX PT bone cancer, comprises single sequence expressing a fusion of growth
XX PT factor and protease inhibitor.
XX XX Claim 8; Fig 3; 8pp; German.
XX PS This invention describes a novel agent (A) for post-operative insertion,
XX CC after removal of bone tumor, comprising a nucleic acid (NA1) encoding a
XX CC growth factor, especially of the transforming growth factor superfamily,

CC linked by an oligonucleotide (ON) to a sequence (NA2) encoding a protease
CC inhibitor (PI). The product of the invention has osteopathic and
CC vulnery activity and can be used for gene therapy. (A) are used to
CC promote regeneration of bone after surgical removal of primary or
CC metastatic bone cancers. (A) make it possible to use less extensive
CC surgery (removal of less bone), since it reduces the risk of new
CC metastases arising from the borders of the resected zone. It also
CC improves growth of bone into prostheses, resulting in shorter recovery
CC times and stronger incorporation of the prosthesis, and reduces the need
CC for further surgery. This sequence represents a PCR primer used in the
CC amplification of the cystatin C gene used to illustrate the method of the
XX invention
XX SQ Sequence 18 BP; 1 A; 3 C; 11 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 7.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 229 AGTGGTGGTGGTGGCGG 245
DB 1 AGCGTGGCGGTGGCGG 17
RESULT 985
ABK14145
ID ABK14145 standard; DNA; 18 BP.
XX AC ABK14145;
XX XX 08-MAY-2002 (first entry)
XX DE Chlorinated ethylene-decomposing bacteria detection DNA KWI-De3.
XX XX Chlorinated ethylene-decomposing bacteria; 16S rRNA; 16S rDNA; ss; probe;
XX KW PCR; primer; soil; underground water; chlorinated ethylene; KWI-De3;
XX KW chlorinated ethane; Dehalococoides.
XX OS Synthetic.
XX XX EP1176216-A2.
XX PN 30-JAN-2002.
XX XX 23-JUL-2001; 2001EP-00117844.
XX PF 24-JUL-2000; 2000JP-00227580.
XX PR 09-MAR-2001; 2001JP-00066001.
XX XX (KURK) KURITA WATER IND LTD.
XX PA Nakamura K, Ueno T;
XX PI WPI; 2002-173127/23.
XX DR New nucleic acid for detecting chlorinated ethylene-decomposing bacteria
XX XX used to purify soil or underground water contaminated with chlorinated
XX XX ethylene or ethane.
XX PS Claim 1; Page 7; 22pp; English.
XX XX The invention relates to a nucleic acid which hybridises to the 16S
XX CC ribosomal (deoxy)ribonucleic acid of chlorinated ethylene-decomposing
XX CC bacteria. The nucleic acid can be used as a labelled probe for detecting
XX CC chlorinated ethylene-decomposing bacteria (e.g. Dehalococoides)
XX CC comprising the novel nucleic acid by DNA hybridisation using the labelled
XX CC probe as an indicator. The bacteria can also be detected by performing
XX CC PCR using the nucleic acid as a primer and the sample nucleic acid as a
XX CC template, and detecting newly synthesised DNA. A method for decomposing
XX CC chlorinated ethylene or ethane comprises detecting chlorinated ethylene-
XX CC decomposing bacteria using underground water or soil as a sample, and
XX CC introducing the water/soil containing the bacteria, to soil or
XX CC underground water contaminated by chlorinated ethylene or ethane. The

CC methods are therefore useful for purifying soil or underground water
 CC contaminated with chlorinated ethylene or ethane. This sequence
 CC represents a nucleic acid which hybridises to nucleic acid of chlorinated
 CC ethylene-decomposing bacteria

XX Sequence 18 BP; 5 A; 3 C; 7 G; 3 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.8; DB 1; Length 18;
 Best Local Similarity 88.2%; Pred. No. 7.8e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 596 GCTTGGGAACTGGAG 612
 ||||| ||||| ||||| |||||
 Db 1 GCTTGGGAACTGAAG 17

RESULT 986

ABS64463
 ID ABS64463 standard; DNA; 18 BP.

AC ABS64463;

XX 15-NOV-2002 (first entry)

DE Human TGF-beta binding PCR primer SR1 #2.

XX Human; NOVX; neurodegenerative disease; Alzheimer's disease; anxiety;
 KW Parkinson's disease; Huntington's disease; neurological disorder;
 KW schizophrenia; manic depression; mental retardation; angina pectoris;
 KW cardiovascular disease; acute heart failure; myocardial infarction;
 KW muscular disease; muscular disorder; retinal disease; photoreception;
 KW deafness; keratinisation disorder; cancer; ovarian cancer; melanoma;
 KW immunological disorder; inflammatory disease; immune disease; diabetes;
 KW bacterial infection; fungal infection; protozoal infection; obesity;
 KW viral infection; reproductive system disorder; metabolic disturbance;
 KW anorexia; wasting disorder; chronic disease; infectious disease;
 KW dyslipidaemia; TGF-beta binding; cloning; PCR; primer; ss.

XX Homo sapiens.

XX WO200264791-A2.

XX 22-AUG-2002.

XX 10-DEC-2001; 2001WO-US048369.

XX 08-DEC-2000; 2000US-0254329P.

XX 14-DEC-2000; 2000US-0255648P.

XX 15-MAY-2001; 2001US-0291037P.

XX 08-JUN-2001; 2001US-0297173P.

XX 08-JUN-2001; 2001US-0309258P.

XX 29-AUG-2001; 2001US-0315639P.

XX 01-OCT-2001; 2001US-0326393P.

XX (CURA-) CURAGEN CORP.

XX Alcobrook JP, Anderson DW, Burgess CE, Boldog FL, Casman SJ;

PI Colman SD, Edinger SR, Ellerman K, Gerlach V, Gorman L, Grosse WM;

PI Guo X, Herrmann JL, Kekuda R, Lepley DM, Li L, Macdougall JR;

PI Millet I, Pena CE, Peyman JA, Rastelli L, Rieger DK, Shimkets RA;

PI Smithson G, Spytek KA, Stone DU, Tchernev VT, Vernet CAM, Voss EZ;

PI Zerhusen BD, Zhong H, Zhong M;

XX WPI; 2002-643486/69.

XX New NOVX polypeptides and polynucleotides useful for treating or
 PT preventing e.g. neurodegenerative diseases, neurological disorders,
 PT cardiovascular diseases, muscular diseases and disorders, or
 PT immunological diseases.

PS Example 3; Page 288; 299pp; English.

CC The present invention relates to new NOVX polypeptides. The polypeptides,

CC polynucleotides and antibodies are useful in the manufacture of a
 CC medicament for treating or preventing neurodegenerative diseases (e.g.
 CC Alzheimer's disease, Parkinson's disease, or Huntington's disease),
 CC neurological disorders (e.g. anxiety, schizophrenia, manic depression or
 CC mental retardation), cardiovascular disease (e.g. acute heart failure,
 CC angina pectoris or myocardial infarction), muscular diseases and
 CC disorders, retinal diseases (including those involving photoreception,
 CC deafness and keratinisation disorders), cancer (e.g. ovarian cancer or
 CC melanoma), immunological disorders, inflammatory and immune diseases,
 CC bacterial, fungal, protozoal and viral infections, and reproductive
 CC system disorders. The proteins of the invention may be used to screen
 CC drugs or compounds that modulate the NOVX protein activity or expression,
 CC as well as to treat disorders characterised by insufficient or excessive
 CC production of NOVX protein or protein forms that have decreased or
 CC aberrant activity compared to NOVX wild type protein, such as diabetes,
 CC obesity, metabolic disturbances associated with obesity, anorexia and
 CC wasting disorders associated with chronic diseases and various cancers,
 CC infectious diseases and various dyslipidaemias. The nucleic acid
 CC sequences of the invention may be used in chromosome mapping, identifying
 CC an individual from minute biological samples (tissue typing), and in
 CC forensic identification of a biological sample. The present nucleic acid
 CC sequence represents a cloning PCR primer that was used in the methods of
 CC the invention for amplification of the NOVX TGF-beta binding gene

XX Sequence 18 BP; 1 A; 10 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;

Best Local Similarity 88.2%; Pred. No. 7.8e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 555 CCTCAGCCGCCGCTCC 571

Db 1 CCTCAGCGTCCGCTCC 17

RESULT 987

ACD66643/C
 ID ACD66643 standard; DNA; 18 BP.

XX ACD66643;

XX 16-SEP-2003 (first entry)

XX Human Inhibitor-kappa B kinase-beta antisense oligonucleotide #12.

XX Human; inhibitor-kappa B kinase-beta; anorectic; antidiabetic;
 KW antiinflammatory; cytostatic; gene therapy; antisense compound; obesity;
 KW diabetes type II; inflammatory disorder; cancer; leukaemia;
 KW antisense oligonucleotide; ss.

XX Homo sapiens.

XX US2003050270-A1.

XX 13-MAR-2003.

XX 24-MAY-2002; 2002US-00156610.

XX 20-NOV-1998; 9AUS-00197008.

XX 28-JUL-1999; 99WO-US016959.

XX 30-AUG-2001; 2001US-00856246.

XX (MONI/) MONIA B P.

XX (COWS/) COWSERT L M.

XX (KOLL/) KOLLER E.

XX Monia BP, Cowsert LM, Koller E;

XX WPI; 2003-512357/48.

XX New antisense compound, useful for preparing a composition for treating

XX obesity, diabetes type II, inflammatory disorder or cancer e.g.,

XX leukemia.

XX Claim 3; Page 22; 49pp; English.

CC The invention describes a new antisense compound, which is 8-30 nucleobases in length targeted to a nucleic acid molecule encoding

CC Inhibitor-kappa B Kinase-beta that specifically hybridises with and

CC inhibits the expression of Inhibitor-kappa B Kinase-beta. The compound is

CC useful for preparing a composition for treating obesity, diabetes type

CC II, inflammatory disorder or cancer e.g., leukaemia. This sequence

CC represents an antisense oligonucleotide used to inhibit the expression

CC of Inhibitor-kappa B Kinase-beta

XX

SQ Sequence 18 BP; 5 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;

Best Local Similarity 88.2%; Pred. No. 7.8e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 831 CACCCCTGTCTTGAGT 847

Db 17 CACCCCTGGCCTTGAGT 1

RESULT 988

ADEI4990

ID ADEI4990 standard; DNA; 18 BP.

XX

AC ADEI4990;

XX

XX 29-JAN-2004 (first entry)

DT

DE Beer spoilage-associated primer SEQ ID 185.

XX ss; primer; detection; beer-spoilage; lactic acid bacteria;

XX Gram-negative bacteria; spoilage bacteria.

XX Lactobacillus buchneri.

XX WO2002103043-A2.

PN

XX

XX 27-DEC-2002.

XX

XX 19-JUN-2002; 2002WO-EP006808.

XX

XX 19-JUN-2001; 2001DB-01029410.

XX (VERM-) VERMICON AG.

PA

XX Beimfohr C, Snaird J;

PI

XX WPI; 2003-175243/17.

DR

XX

XX New oligonucleotides, useful for rapid detection of beer-spoilage

PT bacteria by in situ hybridization, are specific for type, genus or

PT species.

XX

PS Claim 1; SEQ ID NO 185; 88pp; German.

XX

CC This invention describes novel oligonucleotides used in a method for

CC detecting beer-spoilage bacteria in a sample. The bacteria detected

CC include lactic acid bacteria of the genera Lactobacillus or Pediococcus,

CC especially the species L. coryniformis, L. perolens, L. buchneri, L.

CC plantarum, L. fructivorans, L. lindneri, L. casei, L. brevis or P.

CC damnosus or Gram-negative bacteria of the genera Pectinatus and

CC Megaspheara, specifically P. frisingensis, P. cerevisiophilus and M.

CC cerevisiae. The oligonucleotides of the invention provide rapid detection

CC of spoilage bacteria (typically within 48 hours, compared with 7-12 days

CC for conventional culture methods), can detect all relevant bacteria in

CC parallel, can differentiate between species of the same genus, and are

CC easy to use. ADEI4806-ADEI5247 represent the oligonucleotides used in the

CC method of the invention.

XX

SQ Sequence 18 BP; 1 A; 4 C; 11 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;

Best Local Similarity 88.2%; Pred. No. 7.8e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 229 ACTGCTGTGTGGCGG 245

Db 2 AGCGGTGGCGGTGGCGG 18

RESULT 989

ADEI3509/c

ID ADEI3509 standard; DNA; 18 BP.

XX

AC ADEI3509;

XX

DT 29-JAN-2004 (first entry)

XX

DE HLA class I allele specific primer #125.

XX ss; primer; PCR; human; Human Leukocyte Antigen; HLA; genotype.

XX Homo sapiens.

XX US2003165884-A1.

PN

XX

XX 04-SEP-2003.

XX

XX 25-APR-2002; 2002US-00133779.

XX

XX 20-DEC-1999; 99US-0172768P.

PR

XX 20-DEC-2000; 2000US-00747391.

XX

PA (STEM-) STEMCYTE INC.

XX

XX Chow R, Tonai R;

PI

XX WPI; 2003-874916/81.

DR

XX

PT Identifying class I or II Human Leukocyte Antigen genotypes using

PT hybridization and amplification assays.

XX

XX Claim 7; SEQ ID NO 127; 66pp; English.

PS

CC The invention relates to a method of identifying a class I or II Human

CC Leukocyte Antigen (HLA) genotype of a subject using hybridisation and

CC amplification assay. The method is used for determining the HLA genotype

CC of a subject. The present sequence represents a HLA class I allele

CC specific primer.

XX

SQ Sequence 18 BP; 3 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;

Best Local Similarity 88.2%; Pred. No. 7.8e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 503 CTGAGGCTACCTGGAG 519

Db 18 CTGAGGCTACCTGGAG 2

RESULT 990

AAT11974/c

ID AAT11974 standard; DNA; 19 BP.

XX

AC AAT11974;

XX

XX 25-MAR-2003 (revised)

DT

XX 13-MAR-1996 (first entry)

DE

XX CMV antisense oligonucleotide (ISIS 5478).

XX

XX antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis;

intermediate early complex: IE1: DNA polymerase gene; ss.
FT to a polyamide backbone"

Synthetic.
PN W09504748-A1.

Key	Location/Qualifiers
PD	16-FEB-1995.

modified_base	
1..113	
/+acc=	a
09-AUG-1994	PE
94WO-US09039.	

AA	09-AUG-1993	93US-00104438
PP		
/note="phosphorothioate backbone"		

US5442049-A.
XX
XX
DA
(TSTS-) TSTS PHARM INC

[illegible]

25-JAN-1993; 93US-00009263.

19-NOV-1992; 92US-00927506. XX

(ISIS-) ISIS PHARM INC.
PT papilloma:virus - are stable anti-sense molecules with high affinity for

Baker B, Draper K, Anderson K; XX

WPT: 1995-292538/39.

New oligo-nucleotide inhibitors of cytomegalovirus replication - by binding to CC acid (pNA) subunit and (B) have a sequence hybridisable to AUG region, CC new oligomers are claimed which (A) have at least one reference

a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and treatment of cytomegalovirus infection/excretion in immunocompromised patients, including patients with acquired immunodeficiency syndrome (AIDS).

CC hybridisable to the E, E2, E4, E5, E6, E7, E8, E9, E10, E11, E12, E13, E14, E15, E16, E17, E18, E19, E20, E21, E22, E23, E24, E25, E26, E27, E28, E29, E30, E31, E32, E33, E34, E35, E36, E37, E38, E39, E40, E41, E42, E43, E44, E45, E46, E47, E48, E49, E50, E51, E52, E53, E54, E55, E56, E57, E58, E59, E60, E61, E62, E63, E64, E65, E66, E67, E68, E69, E70, E71, E72, E73, E74, E75, E76, E77, E78, E79, E80, E81, E82, E83, E84, E85, E86, E87, E88, E89, E90, E91, E92, E93, E94, E95, E96, E97, E98, E99, E100, E101, E102, E103, E104, E105, E106, E107, E108, E109, E110, E111, E112, E113, E114, E115, E116, E117, E118, E119, E120, E121, E122, E123, E124, E125, E126, E127, E128, E129, E130, E131, E132, E133, E134, E135, E136, E137, E138, E139, E140, E141, E142, E143, E144, E145, E146, E147, E148, E149, E150, E151, E152, E153, E154, E155, E156, E157, E158, E159, E160, E161, E162, E163, E164, E165, E166, E167, E168, E169, E170, E171, E172, E173, E174, E175, E176, E177, E178, E179, E180, E181, E182, E183, E184, E185, E186, E187, E188, E189, E190, E191, E192, E193, E194, E195, E196, E197, E198, E199, E200, E201, E202, E203, E204, E205, E206, E207, E208, E209, E210, E211, E212, E213, E214, E215, E216, E217, E218, E219, E220, E221, E222, E223, E224, E225, E226, E227, E228, E229, E230, E231, E232, E233, E234, E235, E236, E237, E238, E239, E240, E241, E242, E243, E244, E245, E246, E247, E248, E249, E250, E251, E252, E253, E254, E255, E256, E257, E258, E259, E260, E261, E262, E263, E264, E265, E266, E267, E268, E269, E270, E271, E272, E273, E274, E275, E276, E277, E278, E279, E280, E281, E282, E283, E284, E285, E286, E287, E288, E289, E290, E291, E292, E293, E294, E295, E296, E297, E298, E299, E300, E301, E302, E303, E304, E305, E306, E307, E308, E309, E310, E311, E312, E313, E314, E315, E316, E317, E318, E319, E320, E321, E322, E323, E324, E325, E326, E327, E328, E329, E330, E331, E332, E333, E334, E335, E336, E337, E338, E339, E340, E341, E342, E343, E344, E345, E346, E347, E348, E349, E350, E351, E352, E353, E354, E355, E356, E357, E358, E359, E360, E361, E362, E363, E364, E365, E366, E367, E368, E369, E370, E371, E372, E373, E374, E375, E376, E377, E378, E379, E380, E381, E382, E383, E384, E385, E386, E387, E388, E389, E390, E391, E392, E393, E394, E395, E396, E397, E398, E399, E400, E401, E402, E403, E404, E405, E406, E407, E408, E409, E410, E411, E412, E413, E414, E415, E416, E417, E418, E419, E420, E421, E422, E423, E424, E425, E426, E427, E428, E429, E430, E431, E432, E433, E434, E435, E436, E437, E438, E439, E440, E441, E442, E443, E444, E445, E446, E447, E448, E449, E450, E451, E452, E453, E454, E455, E456, E457, E458, E459, E460, E461, E462, E463, E464, E465, E466, E467, E468, E469, E470, E471, E472, E473, E474, E475, E476, E477, E478, E479, E480, E481, E482, E483, E484, E485, E486, E487, E488, E489, E490, E491, E492, E493, E494, E495, E496, E497, E498, E499, E500, E501, E502, E503, E504, E505, E506, E507, E508, E509, E510, E511, E512, E513, E514, E515, E516, E517, E518, E519, E520, E521, E522, E523, E524, E525, E526, E527, E528, E529, E530, E531, E532, E533, E534, E535, E536, E537, E538, E539, E540, E541, E542, E543, E544, E545, E546, E547, E548, E549, E550, E551, E552, E553, E554, E555, E556, E557, E558, E559, E560, E561, E562, E563, E564, E565, E566, E567, E568, E569, E570, E571, E572, E573, E574, E575, E576, E577, E578, E579, E580, E581, E582, E583, E584, E585, E586, E587, E588, E589, E590, E591, E592, E593, E594, E595, E596, E597, E598, E599, E600, E601, E602, E603, E604, E605, E606, E607, E608, E609, E610, E611, E612, E613, E614, E615, E616, E617, E618, E619, E620, E621, E622, E623, E624, E625, E626, E627, E628, E629, E630, E631, E632, E633, E634, E635, E636, E637, E638, E639, E640, E641, E642, E643, E644, E645, E646, E647, E648, E649, E650, E651, E652, E653, E654, E655, E656, E657, E658, E659, E660, E661, E662, E663, E664, E665, E666, E667, E668, E669, E670, E671, E672, E673, E674, E675, E676, E677, E678, E679, E680, E681, E682, E683, E684, E685, E686, E687, E688, E689, E690, E691, E692, E693, E694, E695, E696, E697, E698, E699, E700, E701, E702, E703, E704, E705, E706, E707, E708, E709, E710, E711, E712, E713, E714, E715, E716, E717, E718, E719, E720, E721, E722, E723, E724, E725, E726, E727, E728, E729, E730, E731, E732, E733, E734, E735, E736, E737, E738, E739, E740, E741, E742, E743, E744, E745, E746, E747, E748, E749, E750, E751, E752, E753, E754, E755, E756, E757, E758, E759, E760, E761, E762, E763, E764, E765, E766, E767, E768, E769, E770, E771, E772, E773, E774, E775, E776, E777, E778, E779, E780, E781, E782, E783, E784, E785, E786, E787, E788, E789, E790, E791, E792, E793, E794, E795, E796, E797, E798, E799, E800, E801, E802, E803, E804, E805, E806, E807, E808, E809, E810, E811, E812, E813, E814, E815, E816, E817, E818, E819, E820, E821, E822, E823, E824, E825, E826, E827, E828, E829, E830, E831, E832, E833, E834, E835, E836, E837, E838, E839, E840, E

CC DNA (ssDNA) to produce antisense-type gene regulation moieties. Hence, these may be used therapeutically for modulation of oncogenesis and other cellular functions.

cytomegalovirus (CMV) that displayed activities of at least 50 % of CC papillomavirus processes and also as diagnostics (e.g., as probes for

mismatches could be tolerated without loss of antiviral activity. CC single stranded DNA. They are also able to form triple helices in which

polymerase proteins have been shown to be effective in therapy, CC with the resulting double helix or with the first PNA strand. The PNAs with the first PNA strand.

Prophylaxis and treatment of an infectious disease may be mediated by the use of non-biological cellular uptake. Further, since they contain amides of non-biological CC cellular uptake. Further, since they contain amides of non-biological

incorporate phosphonate backbones, aryl and halogen-substituted sugar moieties at the 2' position (updated on 25-MAR-2003 to correct pp moieties at the 2' position). The present sequence targets CMV IE2 nuclear localisation proteases. The present sequence targets CMV IE2 nuclear localisation

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field.)
      CC
      CC signal 2
      CC
      CC
      CC
```

Sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;
 sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;
 sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;

[illegible]

Aligner	Conservative	Mismatches	Indels	Gaps	Conservative	Mismatches	Indels	Gaps
Aligner 1	15	0	2	0	15	0	2	0
Aligner 2	15	0	2	0	15	0	2	0
Aligner 3	15	0	2	0	15	0	2	0
Aligner 4	15	0	2	0	15	0	2	0
Aligner 5	15	0	2	0	15	0	2	0
Aligner 6	15	0	2	0	15	0	2	0
Aligner 7	15	0	2	0	15	0	2	0
Aligner 8	15	0	2	0	15	0	2	0
Aligner 9	15	0	2	0	15	0	2	0
Aligner 10	15	0	2	0	15	0	2	0
Aligner 11	15	0	2	0	15	0	2	0
Aligner 12	15	0	2	0	15	0	2	0
Aligner 13	15	0	2	0	15	0	2	0
Aligner 14	15	0	2	0	15	0	2	0
Aligner 15	15	0	2	0	15	0	2	0
Aligner 16	15	0	2	0	15	0	2	0
Aligner 17	15	0	2	0	15	0	2	0
Aligner 18	15	0	2	0	15	0	2	0
Aligner 19	15	0	2	0	15	0	2	0
Aligner 20	15	0	2	0	15	0	2	0
Aligner 21	15	0	2	0	15	0	2	0
Aligner 22	15	0	2	0	15	0	2	0
Aligner 23	15	0	2	0	15	0	2	0
Aligner 24	15	0	2	0	15	0	2	0
Aligner 25	15	0	2	0	15	0	2	0
Aligner 26	15	0	2	0	15	0	2	0
Aligner 27	15	0	2	0	15	0	2	0
Aligner 28	15	0	2	0	15	0	2	0
Aligner 29	15	0	2	0	15	0	2	0
Aligner 30	15	0	2	0	15	0	2	0
Aligner 31	15	0	2	0	15	0	2	0
Aligner 32	15	0	2	0	15	0	2	0
Aligner 33	15	0	2	0	15	0	2	0
Aligner 34	15	0	2	0	15	0	2	0
Aligner 35	15	0	2	0	15	0	2	0
Aligner 36	15	0	2	0	15	0	2	0
Aligner 37	15	0	2	0	15	0	2	0
Aligner 38	15	0	2	0	15	0	2	0
Aligner 39	15	0	2	0	15	0	2	0
Aligner 40	15	0	2	0	15	0	2	0
Aligner 41	15	0	2	0	15	0	2	0
Aligner 42	15	0	2	0	15	0	2	0
Aligner 43	15	0	2	0	15	0	2	0
Aligner 44	15	0	2	0	15	0	2	0
Aligner 45	15	0	2	0	15	0	2	0
Aligner 46	15	0	2	0	15	0	2	0
Aligner 47	15	0	2	0	15	0	2	0
Aligner 48	15	0	2	0	15	0	2	0
Aligner 49	15	0	2	0	15	0	2	0
Aligner 50	15	0	2	0	15	0	2	0
Aligner 51	15	0	2	0	15	0	2	0
Aligner 52	15	0	2	0	15	0	2	0
Aligner 53	15	0	2	0	15	0		

133 ATGAAGAGATCAAACG 149
Qy

18	AGAAGAGAGCAACG 2	Db	18	AGAAGAGAGCAACG 2

LT 991

RESULT 992

1678/C
AT01576 standard. DNA; 19 BP.
ID AAC67044 standard; DNA; 19 BP.

REACTS:
AA
AC AM67044.

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	

[illegible][illegible]

antiviral; diagnostic; ss.
KW oxygen-regulated gene; ss.

OS Synthetic.

Key	Location/Qualifiers
PN	WO9718225-A1.

[illegible]

notes="at least one (and preferably all) of the backbone
subunits are composed of amide units so that the
polymer is composed of amide units"
96WO-US018504.
PP 14-NOV-1996:

oligomer consists of the nucleobases attached covalently

PR 14-NOV-1995; 95US-0006733P.
XX (GEO) GEN HOSPITAL CORP.
XX Miller SI;
XX WPI; 1997-289217/26.
XX New isolated Salmonella secreted proteins and related genes - used to
PT develop products for the detection, treatment or prevention of Salmonella
PT infections.
XX Example 1; Page 29; 95pp; English.
XX PCR primers DP15 (AAT67043) and DP17 (AAT67044) were used to amplify a
CC 724-bp org gene probe. The probe can be used to identify the Salmonella
CC typhimurium oxygen-regulated gene (org)
XX Sequence 19 BP; 2 A; 7 C; 5 G; 5 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 8.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1272 GGAGACGTGCCAGGCA 1288
DB 18 GGAGAACTGCCAGGCA 2
RESULT 993
AAX10245
ID AAX10245 standard; DNA; 19 BP.
XX AC AAX10245;
XX 24-MAR-1999 (first entry)
XX Human biallelic polymorphic marker downstream primer #551.
XX Polymorphism; biallelic; human; forensic; paternity testing; disease;
KW detection; phenotypic typing; characteristic; infection; hereditary;
KW autoimmune disease; cancer; inflammation; drug; therapy; medication;
KW treatment; marker; primer; ss.
XX Synthetic.
OS Homo sapiens.
XX WO9820165-A2.
XX 14-MAY-1998.
XX 05-NOV-1997; 97WO-US020313.
XX 06-NOV-1996; 96US-0030455P.
XX (WHED) WHITEHEAD INST BIOMEDICAL RES.
XX Lander ES, Wang D, Hudson T;
XX WPI; 1998-286974/25.
XX New isolated nucleic acid segments from the human genome - used for
PT determining polymorphic forms for use in e.g. forensics, paternity
PT testing or phenotypic typing for disease.
XX Claim 16; Page 219; 310pp; English.
XX AAX09121-X10268 are allele-specific oligonucleotide primers used in the
CC isolation of various biallelic polymorphic markers found in the human
CC genome (represented in AAX10269-X12937). These primers can be used in a
CC method for determining polymorphic forms in an individual for use in e.g.
CC forensics, paternity testing or for phenotypic typing for diseases such
CC as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular

CC dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial
CC hypercholesterolemia, polycystic kidney disease, hereditary
CC spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary
CC haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos
CC syndrome, osteogenesis imperfecta, acute intermittent porphyria,
CC autoimmune diseases, inflammation, cancer, diseases of the nervous
CC system, infection by pathogenic microorganisms, and characteristics such
CC as longevity, appearance (e.g. baldness, obesity), strength, speed,
CC endurance, fertility, and susceptibility or receptivity to particular
CC drugs or therapeutic treatments. The isolated polymorphic nucleic acid
CC segments can also be used to produce medicaments for the treatment or
XX prophylaxis of such diseases
SQ Sequence 19 BP; 8 A; 6 C; 4 G; 1 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 8.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1297 AACGAGGAGTTCAGAC 1313
DB 1 AACGAGGAGTTCAGAC 17
RESULT 994
AAV01575
ID AAV01575 standard; DNA; 19 BP.
XX AC AAV01575;
XX 01-JUN-1998 (first entry)
XX H. capsulatum rRNA ITS1 primer 1724F.
XX Internal transcribed spacer; ITS; ribosomal RNA; 18S; 5.8S; ss; primer;
KW PCR; amplification; probe; hybridisation; detection; histoplasmosis.
XX Synthetic.
OS Ajellomyces capsulatus.
XX US5693501-A.
XX 02-DEC-1997.
XX 08-MAR-1995; 95US-00400580.
XX 08-MAR-1995; 95US-00400580.
XX (INDV) UNIV INDIANA ADVANCED RES & TECHNOLOGY.
XX Jiang B, Lee C;
XX WPI; 1998-031751/03.
XX Histoplasma capsulatum DNA sequences - useful as primers for diagnosing
PT histoplasmosis.
XX Example 1; Col 5; 10pp; English.
XX Primers AAV01575-V01576 were used to amplify the internal transcribed
CC spacer 1 (ITS1) sequence from the Histoplasma capsulatum large subunit
CC ribosomal genes (AAV01567). The ITS1 sequence corresponds to the region
CC between the 3' end of the 18S ribosomal gene and the 5' end of the 5.8S
CC ribosomal gene. The ITS1 sequence was PCR amplified from isolated DNA
CC from both the yeast and mycelial forms of H. capsulatum. Fragments of the
CC sequence (e.g. AAV01568-V01574) can be used as primers and probes for H.
CC capsulatum infection (histoplasmosis) in a patient
SQ Sequence 19 BP; 5 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 8.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 622 AAGCTGACAACTGGG 638
 Db 1 AAGCTGGTCAACTGG 17

RESULT 995
 AAX17891/C
 ID AAX17891 standard; DNA; 19 BP.

XX AC AAX17891;
 XX DT 11-MAY-1999 (first entry)

XX DE Anti-CMV oligonucleotide #5478.

XX KW Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;
 KW cytomagalovirus; inhibition; replication; sugar modification;
 KW phosphorothioate; infection; retinitis; ss.

XX OS Synthetic.
 OS Human herpesvirus 5.
 XX PN WO9845314-A1.
 XX PD 15-OCT-1998.

XX PF 07-APR-1998; 98WO-US006895.
 XX PR 09-APR-1997; 97US-00838715.
 XX PA (ISIS-) ISIS PHARM INC.

XX PI Draper KG, Kisner DL, Anderson KP, Chapman S;
 XX DR WPI; 1998-568330/48.

XX PT New antisense oligonucleotides that target cytomegalovirus nucleic acid -
 PT particularly including 2-methoxyethoxy sugar modifications, especially
 PT for treating viral retinitis, with long-lasting retention in the retina.
 XX SQ Claim 7; Page 30; 99pp; English.

XX CC Antisense oligonucleotides (AAX17861-X17924) are targeted to a nucleic
 CC acid (AAX17925-X17948) encoding IE (immediate early) 1 or 2, or DNA
 CC polymerase of cytomegalovirus (CMV) and are able to inhibit CMV
 CC replication. Optionally the oligonucleotides include at least one 2'-(2-
 CC methoxyethoxy) sugar modification or phosphorothioate internucleotide
 CC linkages. The oligonucleotides are used to inhibit CMV infections (by in
 CC vivo or in vitro contact with cells, tissues or body fluids), especially
 CC to treat or prevent CMV infections, particularly retinitis
 XX SQ Sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
 Best Local Similarity 88.2%; Pred. No. 8.2e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 133 ATGAAGAGATCAAAACG 149
 Db 18 AAGAAGAGAGCAACG 2

RESULT 996
 AAX04627/C
 ID AAX04627 standard; DNA; 19 BP.

XX AC AAX04627;
 XX DT 12-APR-1999 (first entry)

XX DE PCR primer Taa4R used to amplify alpha-tubulin.
 XX PN WO9957309-A1.

KW Gibberellin 4; GA4; beta-hydroxylase; GA4 homologue; GA4H; GA4H1; GA4H2;
 KW plant growth hormone; seed germination; stem elongation; flowering;
 KW fruiting; stem growth; alpha-tubulin; PCR primer; ss.
 XX OS Synthetic.

XX PN WO9859057-A1.

XX PD 30-DEC-1998.

XX PF 24-JUN-1998; 98WO-US013044.

XX PR 24-JUN-1997; 97US-0050615P.

XX PA (GEHO) GEN HOSPITAL CORP.

XX PA (GOOD/) GOODMAN H M.

XX PA (NGUY/) NGUYEN L V.

XX PA (CHIA/) CHIANG H.

XX PI Goodman HM, Nguyen LV, Chiang H;

XX DR WPI; 1999-105626/09.

XX PT New isolated Gibberellin 4 homologues - derived from Arabidopsis plants,
 PT used to develop products for altering stem growth, e.g. for enhancing
 PT stem elongation, flowering and fruiting.

XX PS Example 5; Page 33; 106pp; English.

XX CC PCR primers AAX04626-27 were used to amplify the alpha-tubulin 4 gene.
 CC The primers are used as an internal control when determining expression
 CC of the GA4H1 gene. GA4H1 is a gibberellin 4 (GA4) homologue. The GA4H
 CC proteins (GA4H1 and GA4H2) have similar functions to GA4. GA4H is
 CC believed to be a member of the enzyme family involved in the biosynthesis
 CC of the gibberellin family of plant growth hormones that promote various
 CC growth and developmental processes in higher plants, such as seed
 CC germination, stem elongation, flowering and fruiting. GA4 is a beta-
 CC hydroxylase, and the homologues may also have 3-beta-hydroxylase
 CC activity, which is critical for controlling stem growth. GA4H may be
 CC applied to crops to enhance and facilitate stem elongation, flowering and
 CC fruiting. Alternatively, the DNA encoding GA4H may be genetically
 CC inserted into the plant host to produce a similar effect

XX SQ Sequence 19 BP; 3 A; 6 C; 2 G; 8 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.8; DB 1; Length 19;
 Best Local Similarity 88.2%; Pred. No. 8.2e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1517 TAAAGGAGATTCAGCTA 1533
 Db 17 TAAAGGAGATTCAGCTA 1

RESULT 997
 AAZ36588/C
 ID AAZ36588 standard; DNA; 19 BP.

XX AC AAZ36588;

XX DT 22-FEB-2000 (first entry)

XX DE Probe hybridising to nucleotides of human c-erb-B-2 (HER-2).

XX KW Human; c-erb-B-2; HER-2; chromosome aberration; probe;
 KW peptide nucleic acid; haemopoietic malignancy; cancer;
 KW inborn constitutional disease; herbicide resistance gene; ss.

XX OS Synthetic.

XX OS Homo sapiens.

XX PN WO9957309-A1.

XX XX

PD 11-NOV-1999.
 XX
 PF 04-MAY-1999; 99WO-DK000245.
 XX
 PR 04-MAY-1998; 98DK-00000615.
 XX
 PA (DAKO-) DAKO AS.
 XX
 PI Pluzek K, Nielsen KV, Adelhorst K;
 XX
 DR WPI; 2000-038821/03.
 XX
 PT Detection of chromosome aberrations, used for detecting diseases and
 XX disorders, infections, and plant alterations related to e.g. herbicide
 XX resistance.
 XX
 PS Example 1; Page 44; 63pp; English.
 XX
 CC Oligonucleotides AAZ36562-97 represent a set of probes hybridising to the
 CC human c-erb-B-2 (HER-2) gene. The probes are used to demonstrate the
 CC method of the invention. The specification describes a method for the
 CC detection of chromosome aberrations in eukaryotic samples uses sets of
 CC peptide nucleic acid (PNA) probes in hybridisation reactions. The method
 CC comprises using at least 2 sets of hybridisation probes, where at least
 CC one set comprises one or more PNA probes capable of hybridising to
 CC specific nucleic acid sequences related to a potential aberration in a
 CC chromosome. The methods can be used for the detection of chromosome
 CC aberrations. They can be used for the diagnosis of disorders and diseases
 CC related to chromosomal aberrations or abnormalities such as e.g.
 CC haematopoietic malignancies, cancers and inborn constitutional diseases. The
 CC method may be used for detecting viral sequences and their localization
 CC in the chromosome. In plant biology, the methods can be used for
 CC monitoring the efficiency of transferring herbicide resistance genes to a
 CC plant
 XX
 SQ Sequence 19 BP; 3 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.8; DB 1; Length 19;
 Best Local Similarity 88.2%; Pred. No. 8.2e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 654 CACCGTCTACAGGCA 670
 DB |||||
 18 CACAGTCTACAGGCA 2
 RESULT 998
 AAZ82434
 ID AAZ82434 standard; DNA; 19 BP.
 XX
 AC AAZ82434;
 XX
 DT 04-DEC-2000 (first entry)
 XX
 DE cdk1 ribozyme binding site #20.
 XX
 KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
 XX
 OS Mammalia.
 XX
 FN WO200032765-A2.
 XX
 PD 08-JUN-2000.
 XX
 PF 06-DEC-1999; 99WO-US028772.
 XX
 PR 04-DEC-1998; 98US-0110954P.
 XX
 PA (IMMU-) IMMUSOL INC.
 XX
 FI Tritz R, Welch PJ, Barber JR, Robbins JM;
 XX
 DR WPI; 2000-412314/35.
 XX
 PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
 XX RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
 XX PCNA and Cyclin B1.
 XX
 PS Disclosure; Page 53; 109pp; English.
 XX
 CC The present invention relates to a hairpin or hammerhead ribozyme,
 CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
 CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
 CC Representative examples of ribozyme recognition sites are given in
 CC AAZ82415 to AAZ86787. The ribozyme of the invention is useful for
 CC inhibiting restenosis by introduction of the ribozyme into cells. The
 CC ribozyme is resistant to endonuclease activity and hence is efficient in
 CC restenosis treatment
 XX
 SQ Sequence 19 BP; 6 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.8; DB 1; Length 19;
 Best Local Similarity 88.2%; Pred. No. 8.2e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1138 TACTCCACTCAGATTGA 1154
 DB |||||
 1 TACTCCACTCAGAAAGA 17
 RESULT 999
 AAZ82874
 ID AAZ82874 standard; DNA; 19 BP.
 XX
 AC AAZ82874;
 XX
 DT 04-DEC-2000 (first entry)
 XX
 DE cdk4 ribozyme binding site #55.
 XX
 KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
 XX
 OS Mammalia.
 XX
 FN WO200032765-A2.
 XX
 PD 08-JUN-2000.
 XX
 PF 06-DEC-1999; 99WO-US028772.
 XX
 PR 04-DEC-1998; 98US-0110954P.
 XX
 PA (IMMU-) IMMUSOL INC.
 XX
 FI Tritz R, Welch PJ, Barber JR, Robbins JM;
 XX
 DR WPI; 2000-412314/35.
 XX
 PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
 XX RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
 XX PCNA and Cyclin B1.
 XX
 PS Disclosure; Page 53; 109pp; English.
 XX
 CC The present invention relates to a hairpin or hammerhead ribozyme,
 CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
 CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
 CC Representative examples of ribozyme recognition sites are given in
 CC AAZ82415 to AAZ86787. The ribozyme of the invention is useful for
 CC inhibiting restenosis by introduction of the ribozyme into cells. The
 CC ribozyme is resistant to endonuclease activity and hence is efficient in
 CC restenosis treatment
 XX
 SQ Sequence 19 BP; 6 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.8; DB 1; Length 19;
 Best Local Similarity 88.2%; Pred. No. 8.2e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
 PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
 PT PCNA and Cyclin B1.
 XX
 PS Disclosure; Page 46; 109pp; English.
 XX
 CC The present invention relates to a hairpin or hammerhead ribozyme,
 CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
 CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
 CC Representative examples of ribozyme recognition sites are given in
 CC AAZ82415 to AAZ86787. The ribozyme of the invention is useful for
 CC inhibiting restenosis by introduction of the ribozyme into cells. The
 CC ribozyme is resistant to endonuclease activity and hence is efficient in
 CC restenosis treatment
 XX
 SQ Sequence 19 BP; 7 A; 6 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.8; DB 1; Length 19;
 Best Local Similarity 88.2%; Pred. No. 8.2e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1138 TACTCCACTCAGATTGA 1154
 DB |||||
 1 TACTCCACTCAGAAAGA 17
 RESULT 999
 AAZ82874
 ID AAZ82874 standard; DNA; 19 BP.
 XX
 AC AAZ82874;
 XX
 DT 04-DEC-2000 (first entry)
 XX
 DE cdk4 ribozyme binding site #55.
 XX
 KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
 XX
 OS Mammalia.
 XX
 FN WO200032765-A2.
 XX
 PD 08-JUN-2000.
 XX
 PF 06-DEC-1999; 99WO-US028772.
 XX
 PR 04-DEC-1998; 98US-0110954P.
 XX
 PA (IMMU-) IMMUSOL INC.
 XX
 FI Tritz R, Welch PJ, Barber JR, Robbins JM;
 XX
 DR WPI; 2000-412314/35.
 XX
 PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
 XX RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
 XX PCNA and Cyclin B1.
 XX
 PS Disclosure; Page 53; 109pp; English.
 XX
 CC The present invention relates to a hairpin or hammerhead ribozyme,
 CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
 CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
 CC Representative examples of ribozyme recognition sites are given in
 CC AAZ82415 to AAZ86787. The ribozyme of the invention is useful for
 CC inhibiting restenosis by introduction of the ribozyme into cells. The
 CC ribozyme is resistant to endonuclease activity and hence is efficient in
 CC restenosis treatment
 XX
 SQ Sequence 19 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.8; DB 1; Length 19;
 Best Local Similarity 88.2%; Pred. No. 8.2e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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Best Local Similarity 88.2%; Pred. No. 8.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 973 CACCGAGACTCAAGCC 989
Db 1 CACCGAGACTCAAGCC 17

RESULT 1000
AAA82729
ID AAA82729 standard; DNA; 19 BP.
XX
AC AAA82729;
XX
DT 04-DEC-2000 (first entry)
XX
DE cdk3 ribozyme binding site #14.
XX
KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
OS Mammalia.
XX
FN WO200032765-A2.
XX
PD 08-JUN-2000.
XX
PF 06-DEC-1999; 99WO-US028772.
XX
PR 04-DEC-1998; 98US-0110954P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Tritz R, Welch PJ, Barber JR, Robbins JM;
XX
WPI; 2000-412314/35.
XX
PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PCNA and Cyclin B1.
XX
PS Disclosure; Page 50; 109pp; English.
XX
SQ Sequence 19 BP; 4 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 8.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 760 TCCCTGCTCAAGACCT 776
Db 2 TCGCTGCTCAAGAACT 18

RESULT 1001
AAA84423
ID AAA84423 standard; DNA; 19 BP.
XX
AC AAA84423;
XX
DT 04-DEC-2000 (first entry)
XX
DE Cyclin D3 ribozyme binding site #35.
XX
KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
```

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XX Mammalia.
OS
XX WO200032765-A2.
XX
XX 08-JUN-2000.
XX
XX 06-DEC-1999; 99WO-US028772.
XX
XX 04-DEC-1998; 98US-0110954P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Tritz R, Welch PJ, Barber JR, Robbins JM;
XX
XX WPI; 2000-412314/35.
XX
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PCNA and Cyclin B1.
XX
XX Disclosure; Page 76; 109pp; English.
XX
XX The present invention relates to a hairpin or hammerhead ribozyme,
designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
XX
XX Representative examples of ribozyme recognition sites are given in
AA82415 to AA86787. The ribozyme of the invention is useful for
inhibiting restenosis by introduction of the ribozyme into cells. The
ribozyme is resistant to endonuclease activity and hence is efficient in
restenosis treatment
XX
XX Sequence 19 BP; 3 A; 3 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 8.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 272 GTGCTGCTCCTGGGAA 288
Db 2 GTGCTGCTCCTAGGAA 18

RESULT 1002
AAA82887
ID AAA82887 standard; DNA; 19 BP.
XX
AC AAA82887;
XX
XX 04-DEC-2000 (first entry)
XX
XX cdk4 ribozyme binding site #68.
XX
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
XX Mammalia.
XX
XX WO200032765-A2.
XX
XX 08-JUN-2000.
XX
XX 06-DEC-1999; 99WO-US028772.
XX
XX 04-DEC-1998; 98US-0110954P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Tritz R, Welch PJ, Barber JR, Robbins JM;
XX
XX WPI; 2000-412314/35.
XX
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
```



```
PT PCNA and Cyclin B1.
XX
PS Disclosure; Page 53; 109pp; English.
XX
CC The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX
SQ Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 8.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1090 GTGACACTGTGTACCG 1106
Db |||||
2 GTTACACTCTGTGTACCG 18

RESULT 1003
AAA83020
ID AAA83020 standard; DNA; 19 BP.
XX
AC AAA83020;
XX
XX 04-DEC-2000 (first entry)
XX
XX cdk6 ribozyme binding site #80.
XX
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX Mammalia.
XX
XX WO200032765-A2.
XX
XX 08-JUN-2000.
XX
XX 06-DEC-1999; 99WO-US028772.
XX
XX 04-DEC-1998; 98US-0110954P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Tritz R, Welch PJ, Barber JR, Robbins JM;
XX
XX WPI; 2000-412314/35.
XX
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
XX RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
XX PCNA and Cyclin B1.
XX
XX Disclosure; Page 55; 109pp; English.
XX
XX The present invention relates to a hairpin or hammerhead ribozyme,
XX designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
XX other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
XX Representative examples of ribozyme recognition sites are given in
XX AAA82415 to AAA86787. The ribozyme of the invention is useful for
XX inhibiting restenosis by introduction of the ribozyme into cells. The
XX ribozyme is resistant to endonuclease activity and hence is efficient in
XX restenosis treatment
XX
XX Sequence 19 BP; 3 A; 3 C; 7 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 8.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

PT PCNA and Cyclin B1.
XX
PS Disclosure; Page 53; 109pp; English.
XX
CC The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX
SQ Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 8.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1159 TGGGCTGTGGCTGCAT 1175
Db |||||
2 TGGAGTGTGGCTGCAT 18

RESULT 1004
AAA82748
ID AAA82748 standard; DNA; 19 BP.
XX
AC AAA82748;
XX
XX 04-DEC-2000 (first entry)
XX
XX cdk3 ribozyme binding site #33.
XX
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX Mammalia.
XX
XX WO200032765-A2.
XX
XX 08-JUN-2000.
XX
XX 06-DEC-1999; 99WO-US028772.
XX
XX 04-DEC-1998; 98US-0110954P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Tritz R, Welch PJ, Barber JR, Robbins JM;
XX
XX WPI; 2000-412314/35.
XX
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
XX RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
XX PCNA and Cyclin B1.
XX
XX Disclosure; Page 51; 109pp; English.
XX
XX The present invention relates to a hairpin or hammerhead ribozyme,
XX designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
XX other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
XX Representative examples of ribozyme recognition sites are given in
XX AAA82415 to AAA86787. The ribozyme of the invention is useful for
XX inhibiting restenosis by introduction of the ribozyme into cells. The
XX ribozyme is resistant to endonuclease activity and hence is efficient in
XX restenosis treatment
XX
XX Sequence 19 BP; 2 A; 8 C; 3 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 8.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 919 TTCCCTGTCCAGTGTCT 935
Db |||||
3 TACCTCTTCCAGTGTCT 19

RESULT 1005
AAA82639
ID AAA82639 standard; DNA; 19 BP.
XX
AC AAA82639;
XX
XX 04-DEC-2000 (first entry)
XX
XX cdk2 ribozyme binding site #76.
XX
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX Mammalia.
XX
```

PN WO200032765-A2.
XX
PD 08-JUN-2000.
XX
PF 06-DEC-1999; 99WO-US028772.
XX
PR 04-DEC-1998; 98US-0110954P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Tritz R, Welch PJ, Barber JR, Robbins JM;
XX
DR WPI; 2000-412314/35.
XX
PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.
XX
PS Disclosure; Page 49; 109pp; English.
XX
CC The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AA82415 to AA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX
SQ Sequence 19 BP; 6 A; 5 C; 3 G; 5 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 8.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
OY 1022 TCAAGCTGGCTGACTTT 1038
DB 3 TCAAGCTAGCAGACTTT 19
XX
RESULT 1006
ID AAA82749
XX AAA82749 standard; DNA; 19 BP.
XX
AC AAA82749;
XX
DT 04-DEC-2000 (first entry)
XX
DE cdk3 ribozyme binding site #34.
XX
KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
OS Mammalia.
XX
PN WO200032765-A2.
XX
PD 08-JUN-2000.
XX
PF 06-DEC-1999; 99WO-US028772.
XX
PR 04-DEC-1998; 98US-0110954P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Tritz R, Welch PJ, Barber JR, Robbins JM;
XX
DR WPI; 2000-412314/35.
XX
PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.
XX
PS Disclosure; Page 51; 109pp; English.

XX The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AA82415 to AA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX
SQ Sequence 19 BP; 2 A; 8 C; 3 G; 6 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 8.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
OY 919 TTCTCTTCCAGCTGCT 935
DB 2 TACCTCTTCCAGCTGCT 18
XX
RESULT 1007
ID AAF91202
XX AAF91202 standard; DNA; 19 BP.
XX
AC AAF91202;
XX
DT 04-MAY-2001 (first entry)
XX
DE Human multi drug resistance-1 gene related sequence SEQ ID NO: 289.
XX
KW Human; MDR-1; multi drug resistance-1; drug uptake; disease; cancer;
KW inflammatory disease; neuronal disease; CNS disease;
KW cardiovascular disease; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200109183-A2.
XX
PD 08-FEB-2001.
XX
PF 28-JUL-2000; 2000WO-BP007314.
XX
PR 30-JUL-1999; 99EP-00114938.
PR 22-FEB-2000; 2000EP-00103361.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Brinkmann U, Hoffmeyer S, Eichelbaum M, Roots I;
XX
DR WPI; 2001-159855/16.
XX
PT New polynucleotide encoding a molecular variant Multi Drug Resistance
PT (MDR)-1 polypeptide is useful for diagnosing and treating diseases
PT associated with abnormal MDR-1 expression or function, e.g. cancer.
XX
PS Disclosure; Page 136; 154pp; English.
XX
CC The present invention provides nucleotides encoding molecular variants of
CC the human multi drug resistance-1 (MDR-1) protein. These can be used to
CC identify compounds capable of treating multidrug resistance and
CC sensitivity interfering resulting from polymorphisms in MDR-1, which can
CC lead to difficulties in treating cancer, cardiovascular, neuronal,
CC inflammatory and CNS diseases
XX
SQ Sequence 19 BP; 3 A; 4 C; 5 G; 6 T; 0 U; 1 Other;
XX
Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 78.9%; Pred. No. 8.2e+02;
Matches 15; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
XX
OY 388 TCCTCGGATGAGTGCACT 406
||||| : : |||||

Db 1 TCCTCTGAGATGTCAGT 19
RESULT 1008
AAAF91204/c
ID AAF91204 standard; DNA; 19 BP.
XX AAF91204;
AC
XX
DT 04-MAY-2001 (first entry)
XX
DE Human multi drug resistance-1 gene related sequence SEQ ID NO: 291.
XX
XX Human; MDR-1; multi drug resistance-1; drug uptake; disease; cancer;
KW inflammatory disease; neuronal disease; CNS disease;
KW cardiovascular disease; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200109183-A2.
XX
PD 08-FEB-2001.
XX
PF 28-JUL-2000; 2000WO-BP007314.
XX
PR 30-JUL-1999; 99EP-00114938.
PR 22-FEB-2000; 2000EP-00103361.
XX
XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
PA
XX Brinkmann U, Hoffmeyer S, Eichelbaum M, Roots I;
PI WPI; 2001-159855/16.
XX
DR
XX New polynucleotide encoding a molecular variant Multi Drug Resistance
PT (MDR)-1 polypeptide is useful for diagnosing and treating diseases
PT associated with abnormal MDR-1 expression or function, e.g. cancer.
XX
PS Disclosure; Page 137; 154pp; English.
XX
XX The present invention provides nucleotides encoding molecular variants of
CC the human multi drug resistance-1 (MDR-1) protein. These can be used to
CC identify compounds capable of treating multidrug resistance and
CC sensitivity interfering resulting from polymorphisms in MDR-1, which can
CC lead to difficulties in treating cancer, cardiovascular, neuronal,
CC inflammatory and CNS diseases
XX
XX Sequence 19 BP; 6 A; 5 C; 4 G; 3 T; 0 U; 1 Other;
SQ
Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 78.9%; Pred. No. 8.2e+02;
Matches 15; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
QY 388 TCCTCGATGAGTGCAGT 406
||||| : |||||
Db 19 TCCTCTGAGATGTCAGT 1
RESULT 1009
AAH58036
ID AAF58036 standard; DNA; 19 BP.
XX
AC AAF58036;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk4 ribozyme binding site SEQ ID NO:460.
XX
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnery;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
PN WO200130362-A2.
XX
PD 03-MAY-2001.
XX
XX 26-OCT-2000; 2000WO-US029500.
PF
XX 26-OCT-1999; 99US-0161532P.
PR
XX (IMMU-) IMMUSOL INC.
PA
XX Robbins JM, Tritz R;
PI WPI; 2001-300427/31.
XX
DR
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
PS Example 1; Page 105; 408pp; English.
XX
XX The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC ophthalmological, vulnery, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, reinitopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
XX Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 8.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 973 CACCGAGACCTCAAGCC 989
||||| : |||||
Db 1 CACCGAGATCTCAAGCC 17
RESULT 1010
AAH59585
ID AAF59585 standard; DNA; 19 BP.
XX
AC AAF59585;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cyclin D3 ribozyme binding site SEQ ID NO:2009.
XX
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnery;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW

KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;
KW antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;
KW antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;
KW atopic dermatitis; actinic keratosis; keratolytic; gene therapy; viral wart;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
XX WO200130362-A2.
XX
XX 03-MAY-2001.
XX
XX 26-OCT-2000; 2000WO-US029500.
XX
XX 26-OCT-1999; 99US-0161532P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Robbins JM, Tritz R;
XX
XX WPI; 2001-300427/31.
XX
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
XX Example 1; Page 218; 408pp; English.
XX
XX The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antiproliferative,
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC ophthalmological, vulnary, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 19 BP; 3 A; 3 C; 9 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 8.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 272 GTGCTGCTCCTGGGAA 288
|||||
Db 2 GTGCTGCTCCTGGGAA 18
|||||
RESULT 1011
AAH57801
ID AAH57801 standard; DNA; 19 BP.
XX
AC AAH57801;
XX
DT 10-SEP-2001 (first entry)
XX
XX Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:225.
DE Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW

KW recognition site; target; ribozyme binding site; eye disease; vulnary;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;
KW antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;
KW atopic dermatitis; actinic keratosis; keratolytic; gene therapy; viral wart;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
XX WO200130362-A2.
XX
XX 03-MAY-2001.
XX
XX 26-OCT-2000; 2000WO-US029500.
XX
XX 26-OCT-1999; 99US-0161532P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Robbins JM, Tritz R;
XX
XX WPI; 2001-300427/31.
XX
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
XX Example 1; Page 88; 408pp; English.
XX
XX The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antiproliferative,
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC ophthalmological, vulnary, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 19 BP; 6 A; 5 C; 3 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 8.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1022 TCAAGCTGGCTGACTTT 1038
|||||
Db 3 TCAAGCTAGCAGACTTT 19
|||||
RESULT 1012
AAH58182
ID AAH58182 standard; DNA; 19 BP.
XX
AC AAH58182;
XX
DT 10-SEP-2001 (first entry)
XX
XX Cell-cycle dependent kinase cdk6 ribozyme binding site SEQ ID NO:606.
DE

10-SEP-2001 (first entry)
Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:334.

Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulvury; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; matrix metalloproteinase; growth factor; reducease; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss.

Homo sapiens.
Synthetic.
WO2001130362-A2.
03-MAY-2001.
26-OCT-2000; 2000WO-US029500.
26-OCT-1999; 99US-0161532P.
(IMMU-) IMMUSOL INC.
Robbins JM, Tritz R;
WPI; 2001-300427/31.

Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.

Example 1; Page 96; 409pp; English.

The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (I) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipsoriatic, dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling, ophthalmological, vulvury, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57577 to AAH62099 represent sequences used in the exemplification of the present invention

Sequence 19 BP; 2 A; 8 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 8.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0

Qy 919 TTCTCTTCCAGTCT 935
| | | | | | | | | | | | | | | | | | | | | |
Db 3 TACCTCTTCCAGTCT 19

RESULT 1015
AAH58049
AAH58049 standard; DNA; 19 BP.

```
AAH57596
ID AAH57596 standard; DNA; 19 BP.
XX
AC AAH57596;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk1 ribozyme binding site SEQ ID NO:20.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnery;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200130362-A2.
XX
PD 03-MAY-2001.
XX
PF 26-OCT-2000; 2000WO-US029500.
XX
PR 26-OCT-1999; 99US-0161532P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Robbins JM, Tritz R;
XX
DR WPI; 2001-300427/31.
XX
PT Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
XX
PS Example 1; Page 73; 408pp; English.
XX
XX
XX The present invention describes a method for treating a proliferative
XX skin or eye disease and scarring. The method involves administering a
XX ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX dependent kinase, growth factor or a reductase, or administering a
XX nucleic acid molecule (II) comprising a promoter operably linked to a
XX nucleic acid segment encoding (I). (I) can have antipsoriatic,
XX dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
XX ophthalmological, vulnery, keratolytic and virucide activities, and
XX cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX in gene therapy. (I) and (II) are useful for treating proliferative skin
XX diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX also be used for treating proliferative eye diseases such as diabetic
XX retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
XX prematurity and retinal detachment, and for treating and preventing
XX scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
XX scar. AAH57577 to AAH62099 represent sequences used in the
XX exemplification of the present invention
XX
SQ Sequence 19 BP; 7 A; 6 C; 3 G; 3 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 8.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1138 TACTCCACTCAGATGA 1154
Db 1 TACTCCACTCAGAAAGA 17
```

```
AAH57596
ID AAH57596 standard; DNA; 19 BP.
XX
AC AAH57596;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:335.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnery;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200130362-A2.
XX
PD 03-MAY-2001.
XX
PF 26-OCT-2000; 2000WO-US029500.
XX
PR 26-OCT-1999; 99US-0161532P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Robbins JM, Tritz R;
XX
DR WPI; 2001-300427/31.
XX
PT Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
XX
PS Example 1; Page 96; 408pp; English.
XX
XX
XX The present invention describes a method for treating a proliferative
XX skin or eye disease and scarring. The method involves administering a
XX ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX dependent kinase, growth factor or a reductase, or administering a
XX nucleic acid molecule (II) comprising a promoter operably linked to a
XX nucleic acid segment encoding (I). (I) can have antipsoriatic,
XX dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
XX ophthalmological, vulnery, keratolytic and virucide activities, and
XX cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX in gene therapy. (I) and (II) are useful for treating proliferative skin
XX diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX also be used for treating proliferative eye diseases such as diabetic
XX retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
XX prematurity and retinal detachment, and for treating and preventing
XX scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
XX scar. AAH57577 to AAH62099 represent sequences used in the
XX exemplification of the present invention
XX
SQ Sequence 19 BP; 2 A; 8 C; 3 G; 6 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 8.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 919 TTCTGTTCAGCTGCT 935
Db 1 TTCTGTTCAGCTGCT 935
```


KW PCR primer; ss.
 XX Homo sapiens.
 XX JP2001321190-A.
 XX 20-NOV-2001.
 XX 12-MAR-2001; 2001JP-00068285.
 XX 10-MAR-2000; 2000JP-00066716.
 XX (RIKA) RIKAGAKU KENKYUSHO.
 XX (GENO-) GENOTEX YG.
 XX WPI; 2002-144136/19.
 XX Arraying genome clones.
 XX Claim 4; Page 19; 528pp; Japanese.
 CC The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in multiwell plates numbered for discrimination are mixed in each of the multiwell plates; (b) a primer designed based on the chromosome marker sequence is added to the mixture to carry out an amplification reaction; (c) a signal corresponding to the marker is detected from the resultant amplified product to specify the discrimination Nos. of the multiwell plates containing the clones having said marker sequence; (d) the order of the markers is changed so that the same discrimination Nos. succeed to the maximum in the specified discrimination Nos. to array the multiwell plates; (e) the clones in the multiwell plates of the specified discrimination Nos. are mixed respectively in each wells of longitudinal and lateral directions; (f) the mixed clones are cultured and the resultant cultures are amplified by using the above primer; (g) signals are detected from the amplified products; (h) the clones in the multiwell plates are specified from the detected result; and (i) the clones are reconstituted as the positions on the chromosome and arrayed. The microarray is useful for gene analysis. ABL42957 to ABL45322 represent PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634 represent PCR primers for human chromosome 21q22.1, which are specifically claimed for use in the present invention

SQ Sequence 19 BP; 5 A; 3 C; 9 G; 2 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.8; DB 1; Length 19;
 Best Local Similarity 88.2%; Pred. No. 8.2e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 874 CTGGATGACCTGGGAA 890
 Dd 1 CTGGAGGACTGAGGGAA 17

RESULT 1021
 ABS97865/c
 ID ABS97865 standard; DNA; 19 BP.
 XX ABS97865;
 AC ABS97865;
 XX 23-DEC-2002 (first entry)
 XX Human UDP-glucuronosyl transferase 24B gene PCR primer #2.
 DE Human; ss; primer; cytochrome P450 A1; CYP450A1A1; UGT2B4; MDR1; PCR;
 KW cytochrome P450 A2; CYP450A2; cytochrome P450 02E; CYP45002E1; LTF;
 KW adrenergic receptor beta1; ADRB1; aryl hydrocarbon; AHR; MRP3; NR112;
 KW aryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS;
 KW cyclooxigenase 2; COX2; diazepam binding inhibitor; DBI; haematological;
 KW epoxide hydrolase 2; EPXH2; 5-lipoxygenase activating protein; FLAP;
 KW glutathione-S-transferase 12; GST12; histamine-N-methyl transferase;
 KW HNMT; kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NNMT;
 KW NADPH quinone oxidoreductase 2; NQO2; sulfoltransferase thermolabile; STM;

KW UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7;
 KW UGT2B7; UDP-glucuronosyl transferase; UGT2B15; urokinase receptor; uPA;
 KW multidrug resistance 1; lactotransferrin; orphan nuclear receptor;
 KW multidrug resistance associated protein 3; cancer; prostate;
 KW acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5;
 KW altered drug metabolism; cardiovascular function; colorectal tumour;
 XX central nervous system; pulmonary; immunological.
 XX Homo sapiens.
 OS WO200257410-A2.
 XX 25-JUL-2002.
 XX 28-NOV-2001; 2001WO-US044838.
 XX 28-NOV-2000; 2000US-00724389.
 XX (DNAS-) DNA SCI LAB INC.
 XX Guida M, Hall J;
 XX WPI; 2002-698522/75.
 CC Isolated nucleic acid molecules having polymorphisms in known human genes e.g. cytochrome P450 and cathepsin S useful as genetic linkage markers for locating, identifying and characterizing the genes responsible for disorder-related traits.
 XX Example 18; Page 133; 714pp; English.
 CC This invention relates to the sequence of an isolated nucleic acid molecule comprising at least one base variation from that of a known human cytochrome P450 A1 (CYP450A1), cytochrome P450 A2 (CYP450A2), cytochrome P450 02E1 (CYP45002E1), adrenergic receptor beta1 (ADBR1), aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator (ARNT), cathepsin S (CTSS), cyclooxigenase 2 (COX2), diazepam binding inhibitor (DBI), epoxide hydrolase 2 (EPXH2), 5-lipoxygenase activating protein (FLAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl transferase (HNMT), NADPH quinone oxidoreductase 2 (NQO2), sulfoltransferase thermolabile (STM), UDP-glucuronosyl transferase 1 (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl transferase (UGT2B15), urokinase receptor (uPA), multidrug resistance protein 3 (MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3 (MRP3), orphan nuclear receptor (NR112), or acetylcholine muscarinic receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence. The polymorphisms in the human genes cited in the invention are useful as genetic linkage markers for locating and characterising the genes that are responsible for specific traits within the genome and eventually identifying the genes responsible for a variety of disorder-related traits as a result of their e.g., overexpression, constitutive expression, mutation or underexpression, which may be used in diagnosing and/or treating the disorders. The nucleic acid molecules comprising the polymorphic sequences contained in CYP450A1A1, CYP450A2, CYP45002E1, ARNT, EPXH2, GST12, NNMT, NQO2, NR112, STM, UGT2B4, UGT2B7, UGT2B15, AHR, MDR1 and/or MDR3 are useful for screening individuals for altered drug metabolism. The polymorphic sequences contained in CYP450A1A1, CYP450A2, AHR, MDR1 and/or MDR3 may also be used to screen individuals for susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are used to screen for altered cardiovascular function. In COX2 for altered susceptibility to colorectal tumours, in DBI or CHMR1 for altered central nervous system function, in FLAP and HNMT for altered pulmonary, immunological or haematological function, in KLK2 for altered serine protease activity in the prostate, in LTF for altered immunological or haematological function, in CHMR3, CHMR4 or CHMR5 for altered central and peripheral nervous system function. The present sequence represents a PCR primer used to amplify the sequences of the invention

SQ Sequence 19 BP; 3 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
 Query Match 0.8%; Score 13.8; DB 1; Length 19;
 Best Local Similarity 88.2%; Pred. No. 8.2e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 859 GACCTGACGATACCT 875
| | | | | | | | | |
Db 19 GACCTGAAGGATACCT 3

RESULT 1024
ABL95971/C
ID ABL95971 standard; DNA; 19 BP.
XX AC ABL95971;
XX DT 19-JUN-2002 (first entry)
XX DE Probe #46 for assaying nucleic acids.
XX KW Probe; polymorphism detection; mutation detection; disease diagnosis;
XX KW microbial identification; ss.
XX OS Unidentified.
XX PN WO200208414-A1.
XX PD 31-JAN-2002.
XX PF 27-JUN-2001; 2001WO-IB001147.
XX PR 27-JUN-2000; 2000JP-00193133.
XX PR 03-AUG-2000; 2000JP-00236115.
XX PR 26-SEP-2000; 2000JP-00292483.
XX PA (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.
XX PA (KANK-) KANKYO ENG CO LTD.
XX PI Kurane R, Kanagawa T, Kamagata Y, Torimura M, Kurata S, Yamada K;
XX PI Yokomaku T;
XX DR WPI; 2002-195876/25.
XX XX Fluorescently-labeled nucleic acid probes for assaying nucleic acids and
PT their polymorphism and mutation, particularly useful in science and
PT medicine for e.g. analytical applications, disease diagnosis and
PT microbial identification.
XX XX Example 42; Page 108; 152pp; Japanese.
XX XX The present invention relates to nucleic acid probes, which are useful
CC for assaying nucleic acids by hybridising with a target nucleic acid, in
CC which a single-stranded oligonucleotide is labelled with a fluorescent
CC substance and a quencher in a manner that the fluorescence intensity of
CC the hybridisation reaction system is increased after completion of the
CC hybridisation but no stem loop structure is formed. The probes are useful
CC for assaying nucleic acids and their polymorphism and mutation,
CC particularly useful for e.g. analytical applications, disease diagnosis
CC and microbial identification. The present sequence was used to illustrate
XX the invention
SQ Sequence 19 BP; 5 A; 5 C; 7 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 8.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1721 GCCATGTTACCTGCC 1737
| | | | | | | | | |
Db 19 GCCATGTGCACGTGCC 3

RESULT 1023
ABL95954/C
ID ABL95954 standard; DNA; 19 BP.
XX OS Unidentified.
XX XX

ABL95954;
AC 19-JUN-2002 (first entry)
XX DT Probe #31 for assaying nucleic acids.
XX DE Probe; polymorphism detection; mutation detection; disease diagnosis;
XX KW microbial identification; ss.
XX OS Unidentified.
XX PN WO200208414-A1.
XX PD 31-JAN-2002.
XX PF 27-JUN-2001; 2001WO-IB001147.
XX PR 27-JUN-2000; 2000JP-00193133.
XX PR 03-AUG-2000; 2000JP-00236115.
XX PR 26-SEP-2000; 2000JP-00292483.
XX PA (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.
XX PA (KANK-) KANKYO ENG CO LTD.
XX PI Kurane R, Kanagawa T, Kamagata Y, Torimura M, Kurata S, Yamada K;
XX PI Yokomaku T;
XX DR WPI; 2002-195876/25.
XX XX Fluorescently-labeled nucleic acid probes for assaying nucleic acids and
PT their polymorphism and mutation, particularly useful in science and
PT medicine for e.g. analytical applications, disease diagnosis and
PT microbial identification.
XX XX Example 41; Page 103; 152pp; Japanese.
XX XX The present invention relates to nucleic acid probes, which are useful
CC for assaying nucleic acids by hybridising with a target nucleic acid, in
CC which a single-stranded oligonucleotide is labelled with a fluorescent
CC substance and a quencher in a manner that the fluorescence intensity of
CC the hybridisation reaction system is increased after completion of the
CC hybridisation but no stem loop structure is formed. The probes are useful
CC for assaying nucleic acids and their polymorphism and mutation,
CC particularly useful for e.g. analytical applications, disease diagnosis
CC and microbial identification. The present sequence was used to illustrate
XX the invention
SQ Sequence 19 BP; 5 A; 5 C; 7 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 8.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1721 GCCATGTTACCTGCC 1737
| | | | | | | | | |
Db 19 GCCATGTGCACGTGCC 3

RESULT 1024
ABL95969/C
ID ABL95969 standard; DNA; 19 BP.
XX AC ABL95969;
XX DT 19-JUN-2002 (first entry)
XX DE Probe #44 for assaying nucleic acids;
XX KW Probe; polymorphism detection; mutation detection; disease diagnosis;
XX KW microbial identification; ss.
XX OS Unidentified.
XX XX

PN WO200208414-A1.
XX
PD 31-JAN-2002.
XX
PF 27-JUN-2001; 2001WO-IB001147.
XX
PR 27-JUN-2000; 2000JP-00193133.
PR 03-AUG-2000; 2000JP-00236115.
PR 26-SEP-2000; 2000JP-00292483.
XX
XX (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.
PA (KANK-) KANKYO ENG CO LTD.
XX
XX Kurane R, Kanagawa T, Kamagata Y, Torimura M, Kurata S, Yamada K;
PI Yokomaku T;
XX
XX WPI; 2002-195976/25.
XX
XX Fluorescently-labeled nucleic acid probes for assaying nucleic acids and
PT their polymorphism and mutation, particularly useful in science and
PT medicine for e.g. analytical applications, disease diagnosis and
PT microbial identification.
XX
XX Example 42; Page 108; 152pp; Japanese.
XX
XX The present invention relates to nucleic acid probes, which are useful
CC for assaying nucleic acids by hybridising with a target nucleic acid, in
CC which a single-stranded oligonucleotide is labelled with a fluorescent
CC substance and a quencher in a manner that the fluorescence intensity of
CC the hybridisation reaction system is increased after completion of the
CC hybridisation but no stem loop structure is formed. The probes are useful
CC for assaying nucleic acids and their polymorphism and mutation,
CC particularly useful for e.g. analytical applications, disease diagnosis
CC and microbial identification. The present sequence was used to illustrate
CC the invention
XX
XX Sequence 19 BP; 5 A; 5 C; 7 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 8.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1721 GCCATGTTACCTGCC 1737
DB 19 GCCATGTCACGTGCC 3
RESULT 1025
ABL95961
ID ABL95961 standard; DNA; 19 BP.
AC ABL95961;
XX
XX 19-JUN-2002 (first entry)
DT
DE Probe #38 for assaying nucleic acids.
XX
XX Probe; polymorphism detection; mutation detection; disease diagnosis;
XX microbial identification; ss.
XX
XX Unidentified.
OS
XX WO200208414-A1.
XX
XX 31-JAN-2002.
PD
XX 27-JUN-2001; 2001WO-IB001147.
EF
XX 27-JUN-2000; 2000JP-00193133.
PR
PR 03-AUG-2000; 2000JP-00236115.
PR
PR 26-SEP-2000; 2000JP-00292483.
XX
XX (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.
PA

PA (KANK-) KANKYO ENG CO LTD.
XX
XX Kurane R, Kanagawa T, Kamagata Y, Torimura M, Kurata S, Yamada K;
PI Yokomaku T;
XX
XX WPI; 2002-195976/25.
XX
XX Fluorescently-labeled nucleic acid probes for assaying nucleic acids and
PT their polymorphism and mutation, particularly useful in science and
PT medicine for e.g. analytical applications, disease diagnosis and
PT microbial identification.
XX
XX Example 41; Page 103; 152pp; Japanese.
XX
XX The present invention relates to nucleic acid probes, which are useful
CC for assaying nucleic acids by hybridising with a target nucleic acid, in
CC which a single-stranded oligonucleotide is labelled with a fluorescent
CC substance and a quencher in a manner that the fluorescence intensity of
CC the hybridisation reaction system is increased after completion of the
CC hybridisation but no stem loop structure is formed. The probes are useful
CC for assaying nucleic acids and their polymorphism and mutation,
CC particularly useful for e.g. analytical applications, disease diagnosis
CC and microbial identification. The present sequence was used to illustrate
CC the invention
XX
XX Sequence 19 BP; 2 A; 7 C; 5 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 8.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1721 GCCATGTTACCTGCC 1737
DB 1 GCCATGTCACGTGCC 17
RESULT 1026
ACF62642
ID ACF62642 standard; DNA; 19 BP.
XX
XX ACF62642;
AC ACF62642;
XX
XX 08-OCT-2003 (first entry)
DT
DE Cancer based on CYP3A5 related oligonucleotide SEQ ID NO:471.
XX
XX Cancer; CYP3A5; irinotecan; pharmaceutical; malignant glioma;
XX cytochrome p450; subfamily IIIA; nifedipine oxidase; polypeptide 5;
XX cytosstatic; PCR primer; ss.
XX
XX Synthetic.
OS
XX WO2003013534-A2.
XX
XX 20-FEB-2003.
PD
XX 23-JUL-2002; 2002WO-BP008219.
XX
XX 23-JUL-2001; 2001EP-00117608.
PR
XX 24-MAY-2002; 2002EP-00011710.
PR
XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
PA
XX Heinrich G, Kerb R;
PI
XX WPI; 2003-268144/26.
DR
XX New use of irinotecan for preparation of compositions for treating cancer
PT in subject having genome with variant allele comprising cytochrome p450,
PT subfamily IIIA, polypeptide 5 polynucleotide, termed CYP3A5.
XX
XX Disclosure; Page 44; 86pp; English.
PS
XX

CC The present invention describes the use of irinotecan (I) or its
CC derivative for the preparation of a pharmaceutical composition for
CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC cancer, or malignant glioma in a subject having a genome with a variant
CC allele which comprises a cytochrome p450, subfamily IIIA (nifedipine
CC oxidase), polypeptide 5 (CYP3A5) polynucleotide (II). (I) and (II) have
CC cytostatic activity. The therapeutic applications of (I) is improved,
CC since it is possible to individually treat a subject with an appropriate
CC dosage and/or an appropriate derivative of (I). Therefore, undesirable,
CC harmful or toxic effects are efficiently avoided. Unnecessary and
CC potentially harmful treatment of those subjects who do not respond to the
CC treatment with substances (nonresponders), as well as the development of
CC drug resistances due to suboptimal drug dosing can be avoided. ACF62200
CC to ACF62751 and ABM34912 to ABM35013 represent sequences used in the
CC exemplification of the present invention

XX
SQ Sequence 19 BP; 3 A; 4 C; 5 G; 6 T; 0 U; 1 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 78.9%; Pred. No. 8.2e+02;
Matches 15; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

Qy 388 TCCTCGGATGAGTGCAGT 406
| | | | | : | | | | |
Db 1 TCCTCTGAGATGTCAGT 19

RESULT 1027
ACF62643/C
ID ACF62643 standard; DNA; 19 BP.
XX
AC ACF62643;
XX
DT 08-OCT-2003 (first entry)
XX
DE Cancer based on CYP3A5 related oligonucleotide SEQ ID NO:472.
XX
KW Cancer; CYP3A5; irinotecan; pharmaceutical; malignant glioma;
KW cytochrome p450; subfamily IIIA; nifedipine oxidase; polypeptide 5;
KW cytostatic; PCR primer; ss.
XX
OS Synthetic.

XX
FN WO2003013534-A2.
XX
PD 20-FEB-2003.

XX
DP 23-JUL-2002; 2002WO-EP008219.

XX
PR 23-JUL-2001; 2001EP-00117608.

XX
PR 24-MAY-2002; 2002EP-00011710.

XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.

XX
PI Heinrich G, Kerb R;

XX
DR WPI; 2003-268144/26.

XX
PT New use of irinotecan for preparation of compositions for treating cancer
PT in subject having genome with variant allele comprising cytochrome p450,
PT subfamily IIIA, polypeptide 5 polynucleotide, termed CYP3A5.

XX
PS Disclosure; Page 44; 86pp; English.

XX
CC The present invention describes the use of irinotecan (I) or its
CC derivative for the preparation of a pharmaceutical composition for
CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC cancer, or malignant glioma in a subject having a genome with a variant
CC allele which comprises a cytochrome p450, subfamily IIIA (nifedipine
CC oxidase), polypeptide 5 (CYP3A5) polynucleotide (II). (I) and (II) have
CC cytostatic activity. The therapeutic applications of (I) is improved,
CC since it is possible to individually treat a subject with an appropriate
CC dosage and/or an appropriate derivative of (I). Therefore, undesirable,

CC harmful or toxic effects are efficiently avoided. Unnecessary and
CC potentially harmful treatment of those subjects who do not respond to the
CC treatment with substances (nonresponders), as well as the development of
CC drug resistances due to suboptimal drug dosing can be avoided. ACF62200
CC to ACF62751 and ABM34912 to ABM35013 represent sequences used in the
CC exemplification of the present invention

XX
SQ Sequence 19 BP; 6 A; 5 C; 4 G; 3 T; 0 U; 1 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 78.9%; Pred. No. 8.2e+02;
Matches 15; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

Qy 388 TCCTCGGATGAGTGCAGT 406
| | | | | : | | | | |
Db 19 TCCTCTGAGATGTCAGT 1

RESULT 1028
ADB21313
ID ADB21313 standard; DNA; 19 BP.
XX
AC ADB21313;
XX
DT 20-NOV-2003 (first entry)
XX
DE MRP1 based cancer related nucleic acid SEQ ID NO:471.
XX
KW irinotecan; colorectal cancer; cervical cancer; gastric cancer;
KW lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW variant allele; multidrug resistance protein 1; MRP1; cytostatic; gene;
KW ds.

XX
OS Unidentified.

XX
FN WO2003013533-A2.

XX
PD 20-FEB-2003.

XX
PF 23-JUL-2002; 2002WO-EP008200.

XX
PR 23-JUL-2001; 2001EP-00117608.

XX
PR 24-MAY-2002; 2002EP-00011710.

XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.

XX
PI Heinrich G, Kerb R;

XX
DR WPI; 2003-354397/33.

XX
PT Use of irinotecan or its derivative for preparation of a pharmaceutical
PT composition for treating cancer in a subject having a genome with a
PT variant allele comprising a multidrug resistance protein 1
PT polynucleotide.

XX
PS Disclosure; Page 54; 100pp; English.

XX
CC The present invention describes a method for the use of irinotecan (I) or
CC its derivative for the preparation of a pharmaceutical composition for
CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC cancer, or malignant glioma in a subject having a genome with a variant
CC allele which comprises a multidrug resistance protein 1 (MRP1)
CC polynucleotide (II). (I) has cytostatic activity. (I) or its derivative
CC can be used for the preparation of a pharmaceutical composition for
CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC cancer, or malignant glioma in a subject, where the subject is a human
CC (preferably African or Asian) or a mouse. The present sequence represents
CC a sequence which is used in the exemplification of the present invention.

XX
SQ Sequence 19 BP; 3 A; 4 C; 5 G; 6 T; 0 U; 1 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 78.9%; Pred. No. 8.2e+02;

Matches 15; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 388 TCCTCGGATGAGTGCAGT 406
 DB 1 TCCTCTGAGRATGTGCAGT 19

RESULT 1029
 ADB21314/c
 ID ADB21314 standard; DNA; 19 BP.
 XX
 AC ADB21314;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE MRP1 based cancer related nucleic acid SEQ ID NO:472.
 XX
 KW irinotecan; colorectal cancer; cervical cancer; gastric cancer;
 KW lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
 KW variant allele; multidrug resistance protein 1; MRP1; cytostatic; gene;
 XX ds.
 XX
 OS Unidentified.
 XX
 PN WO2003013533-A2.
 XX
 PD 20-FEB-2003.
 XX
 XX 23-JUL-2002; 2002WO-EP008200.
 PF
 XX 23-JUL-2001; 2001EP-00117608.
 PR
 XX 24-MAY-2002; 2002EP-00011710.
 XX
 PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
 XX
 PI Heinrich G, Kerb R;
 XX
 DR WPI; 2003-354397/33.
 XX
 PT Use of irinotecan or its derivative for preparation of a pharmaceutical
 PT composition for treating cancer in a subject having a genome with a
 PT variant allele comprising a multidrug resistance protein 1
 PT polynucleotide.
 XX
 PS Disclosure; Page 54; 100pp; English.
 XX
 CC The present invention describes a method for the use of irinotecan (I) or
 CC its derivative for the preparation of a pharmaceutical composition for
 CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic
 CC cancer, or malignant glioma in a subject having a genome with a variant
 CC allele which comprises a multidrug resistance protein 1 (MRP1)
 CC polynucleotide (II). (I) has cytostatic activity. (I) or its derivative
 CC can be used for the preparation of a pharmaceutical composition for
 CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic
 CC cancer, or malignant glioma in a subject, where the subject is a human
 CC (preferably African or Asian) or a mouse. The present sequence represents
 CC a sequence which is used in the exemplification of the present invention.
 XX
 SQ Sequence 19 BP; 6 A; 5 C; 4 G; 3 T; 0 U; 1 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
 Best Local Similarity 78.9%; Pred. NO. 8.2e+02;
 Matches 15; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 388 TCCTCGGATGAGTGCAGT 406
 DB 1 TCCTCTGAGRATGTGCAGT 19

RESULT 1030
 ADB88402
 ID ADB88402 standard; DNA; 19 BP.
 XX
 AC ADB88402;
 XX
 DT 04-DEC-2003 (first entry)
 XX
 DE Human UGT1A1 variant allele sequence fragment SEQ ID NO:444.
 XX
 KW ss; irinotecan; cancer; UGT1A1; cytostatic; topoisomerase I inhibitor;
 KW colorectal cancer; cervical cancer; gastric cancer; lung cancer;
 KW ovarian cancer; pancreatic cancer; malignant glioma;
 KW uridine diphosphate glycosyltransferase I member A1.

AC ADB88402;
 XX
 DT 04-DEC-2003 (first entry)
 XX
 DE Human UGT1A1 variant allele sequence fragment SEQ ID NO:443.
 XX
 KW ss; irinotecan; cancer; UGT1A1; cytostatic; topoisomerase I inhibitor;
 KW colorectal cancer; cervical cancer; gastric cancer; lung cancer;
 KW ovarian cancer; pancreatic cancer; malignant glioma;
 KW uridine diphosphate glycosyltransferase I member A1.
 XX
 OS Homo sapiens.
 XX
 PN WO2003013536-A2.
 XX
 PD 20-FEB-2003.
 XX
 XX 23-JUL-2002; 2002WO-EP008217.
 PF
 XX 23-JUL-2001; 2001EP-00117608.
 PR
 XX 24-MAY-2002; 2002EP-00011710.
 XX
 PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
 XX
 PI Heinrich G, Kerb R;
 XX
 DR WPI; 2003-289896/28.
 XX
 PT Use of irinotecan to treat cancer patient by determining if patient has
 PT variant alleles of UGT1A1 gene, administering increased/decreased amounts
 PT of irinotecan based on increased/decreased levels of UGT1A1 gene product.
 XX
 PS Disclosure; Page 58; 107pp; English.
 XX
 CC The invention relates to the novel use of irinotecan to treat a patient
 CC suffering from cancer. This involves determining if the patient has one
 CC or more variant alleles of the UGT1A1 gene, and if the patient has one or
 CC more of such variant alleles, irinotecan is administered in an increased
 CC or decreased amount in comparison to the amount that is administered
 CC without regard to the patient's alleles in the UGT1A1 gene. The invention
 CC has cytostatic activity. A composition of the invention acts as a
 CC topoisomerase I inhibitor. The method is useful for treating a patient,
 CC an animal e.g. mouse or a human, preferably African or Asian, suffering
 CC from cancer such as colorectal, cervical, gastric cancer, lung, ovarian,
 CC pancreatic cancer or malignant glioma. The present sequence is used in
 CC the exemplification of the invention.
 XX
 SQ Sequence 19 BP; 3 A; 4 C; 5 G; 6 T; 0 U; 1 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
 Best Local Similarity 78.9%; Pred. NO. 8.2e+02;
 Matches 15; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 388 TCCTCGGATGAGTGCAGT 406
 DB 1 TCCTCTGAGRATGTGCAGT 19

RESULT 1031
 ADB88403/c
 ID ADB88403 standard; DNA; 19 BP.
 XX
 AC ADB88403;
 XX
 DT 04-DEC-2003 (first entry)
 XX
 DE Human UGT1A1 variant allele sequence fragment SEQ ID NO:444.
 XX
 KW ss; irinotecan; cancer; UGT1A1; cytostatic; topoisomerase I inhibitor;
 KW colorectal cancer; cervical cancer; gastric cancer; lung cancer;
 KW ovarian cancer; pancreatic cancer; malignant glioma;
 KW uridine diphosphate glycosyltransferase I member A1.


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XX PN WO2003070885-A2.
XX PD 28-AUG-2003.
XX PF 13-FEB-2003; 2003WO-US004317.
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409232P.
XX PR 20-SEP-2002; 2002US-0412304P.
XX PR 15-JAN-2003; 2003US-0440129P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI McSwiggen J, Beigelman L, Thompson J;
XX XX WPI; 2003-721687/68.
XX DR
XX PT New short interfering nucleic acid, useful e.g. for treatment and
XX PT diagnosis of obesity or diabetes, downregulates expression of the
XX PT stearyl-CoA desaturase gene.
XX XX
XX PS Example 3; SEQ ID NO 172; 139pp; English.
XX XX
XX CC The present invention describes a short interfering nucleic acid (siNA)
XX CC that downregulates expression of the SCD (stearyl-CoA desaturase) gene
XX CC by RNA interference. Also described: (1) modulating expression of SCD
XX CC genes in cells, tissue explants or organisms by introduction of siNA; (2)
XX CC kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or
XX CC complexes of siNA; and (4) vectors that express siNA. SCD inhibiting
XX CC siNAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and
XX CC virucide activities. The siNAs can be used to modulate expression of SCD
XX CC genes, in cells, tissue explants or organisms, e.g. for treating obesity;
XX CC diabetes (types I and II); atherosclerosis; cancer and viral infections.
XX CC They can also be used for drug screening; diagnosis; target
XX CC identification and validation; genetic engineering; pharmacogenomics;
XX CC studying gene function and gene mapping (e.g. of single-nucleotide
XX CC polymorphisms). The present sequence represents an SCD siNA, which is
XX CC used in the exemplification of the present invention.
XX SQ Sequence 19 BP; 3 A; 8 C; 3 G; 0 T; 5 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 8.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1085 AGGTGGTGACACTGTGG 1101
Db ||||| ||||| |||||
18 AGGTGGAGACACTGCGG 2

RESULT 1039
AAQ15432/c
ID AAQ15432 standard; RNA; 20 BP.
XX AC AAQ15432;
XX XX
XX DT 21-APR-1994 (first entry)
XX XX HPV-16 control primer dt1.
XX DE
XX XX Human papillomavirus; amplification; primer; polymerase chain reaction;
XX KW PCR; ss.
XX XX Synthetic.
XX OS
XX XX EP415755-A.
XX PN
XX PD 06-MAR-1991.
XX XX
XX PF 30-AUG-1990; 90EP-00309492.
XX PR
XX PR 01-SEP-1989; 89US-00401840.
XX XX
XX XX (LIFE-) LIFE TECHN INC.
XX XX
XX XX WPI; 1991-067289/10.
XX XX
XX FT Avoiding contamination during nucleic acid amplification - using
XX FT oligo:nucleotide primer contg. unnatural base which can be selectively
XX FT rendered incapable of further amplification.
XX XX
XX PS Example 1; Pag 7; 10pp; English.
XX XX
XX CC Example 1 describes the amplification of HPV-16 DNA by PCR using the
XX CC primers given in AAQ15430-31 or AAQ15432-33
XX CC
XX SQ Sequence 20 BP; 2 A; 2 C; 7 G; 0 T; 9 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 8.6e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1308 CAAGACATCAACTACC 1324
Db ||||| ||||| |||||
17 CAAGACATCATCGACC 1

RESULT 1040
AAQ15430/c
ID AAQ15430 standard; RNA; 20 BP.
XX AC AAQ15430;
XX XX
XX DT 21-APR-1994 (first entry)
XX XX HPV-16 primer dU1.
XX DE
XX XX Human papillomavirus; amplification; primer; polymerase chain reaction;
XX KW PCR; ss.
XX XX Synthetic.
XX OS
XX XX EP415755-A.
XX PN
XX PD 06-MAR-1991.
XX XX
XX PF 30-AUG-1990; 90EP-00309492.
XX PR
XX PR 01-SEP-1989; 89US-00401840.
XX XX
XX XX (LIFE-) LIFE TECHN INC.
XX XX
XX XX WPI; 1991-067289/10.
XX XX
XX FT Avoiding contamination during nucleic acid amplification - using
XX FT oligo:nucleotide primer contg. unnatural base which can be selectively
XX FT rendered incapable of further amplification.
XX XX
XX PS Example 1; Pag 7; 10pp; English.
XX XX
XX CC Example 1 describes the amplification of HPV-16 DNA by PCR using the
XX CC primers given in AAQ15430-31 or AAQ15432-33
XX CC
XX SQ Sequence 20 BP; 2 A; 2 C; 7 G; 0 T; 9 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 8.6e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1308 CAAGACATCAACTACC 1324
Db ||||| ||||| |||||
17 CAAGACATCATCGACC 1

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Db 17 CAAGACATACATCGACC 1

RESULT 1041

AAQ58627 standard; DNA; 20 BP.

ID AAQ58627

XX AC AAQ58627;

XX 25-MAR-2003 (revised)

DT 23-APR-1994 (first entry)

XX AC AAQ58627;

XX HPV-6 probe.

DE Human papillomavirus; HPV; amplification; primer;

XX Human papillomavirus; HPV; amplification; primer;

KW polymerase chain reaction; PCR; antibody; assay; nitrocellulose filter;

XX ss.

XX Synthetic.

XX FR2660925-A.

XX 18-OCT-1991.

XX 11-APR-1990; 90FR-00004659.

XX 11-APR-1990; 90FR-00004659.

XX (INRM) INSERM INST NAT SANTE & RECH MED.

XX Tchen P, Vautherot JF;

XX WPI; 1992-001368/01.

XX Fixing nucleotide sequence to solid support, e.g. nylon filter - using

PT antibody specific for subtit. on the sequence as intermediate protein,

XX useful e.g. in pathogen typing.

XX Disclosure; Page 14; 20pp; French.

XX The use of probes fixed by antibodies to nitrocellulose filters was

CC exemplified in an assay for HPV. The probes are given in AAQ58627-

CC AAQ58630 and the primers are given in AAQ58631-Q58634. (Updated on 25-MAR

CC -2003 to correct PA field.)

XX Sequence 20 BP; 5 A; 8 C; 1 G; 6 T; 0 U; 0 Other;

SQ Query Match 0.8%; Score 13.8; DB 1; Length 20;

Best Local Similarity 88.2%; Pred. No. 8.6e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1677 CCCCACTACATCTTCC 1693

Db 4 CCGTACTACATCTTCC 20

RESULT 1042

AAQ34599/c

ID AAQ34599 standard; DNA; 20 BP.

XX AC AAQ34599;

XX 25-MAR-2003 (revised)

DT 10-MAY-1993 (first entry)

XX Human papilloma virus type 16 PCR primer.

DE Polymerase chain reaction; HPV 16; amplification; ss.

XX Synthetic.

XX EP522884-A1.

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PD 13-JAN-1993.

XX 13-JUL-1992; 92EP-00306396.

XX 12-JUL-1991; 91US-00728874.

XX (LIFE-) LIFE TECHNOLOGIES INC.

XX Hartley JL, Berninger M;

XX WPI; 1993-010692/02.

XX Oligo:nucleotide-dependent amplification for controlling contamination of

XX prod - by incorporating an exo-sample nucleotide into products.

XX Example; Page 10; 18pp; English.

XX The sequence is that of a PCR primer used in the amplification of a

XX region of the human papilloma virus type 16 (HPV 16) DNA. (Updated on 25-

XX MAR-2003 to correct PN field.)

XX Sequence 20 BP; 2 A; 2 C; 7 G; 9 T; 0 U; 0 Other;

SQ Query Match 0.8%; Score 13.8; DB 1; Length 20;

Best Local Similarity 88.2%; Pred. No. 8.6e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1308 CAAGACATACATCGACC 1324

Db 17 CAAGACATACATCGACC 1

RESULT 1043

AAQ34982/c

ID AAQ34982 standard; DNA; 20 BP.

XX AC AAQ34982;

XX 25-MAR-2003 (revised)

DT 26-MAY-1993 (first entry)

XX PCR primer PV3 (5').

XX Amplification; cervical cancer; HPV-16; human papillomavirus; ss.

XX Synthetic.

XX EF524808-A2.

XX 27-JAN-1993.

XX 22-JUL-1992; 92EP-00306701.

XX 23-JUL-1991; 91US-00733419.

XX (HOFF) HOFFMANN LA ROCHE & CO AG F.

XX (UYN) UNIV NEW YORK STATE RES FOUND.

XX Bloch W, Nuovo GJ;

XX WPI; 1993-028856/04.

XX Compn. for in situ polymerase chain reaction on fixed cells - involves

XX preventing reaction until start of thermal cycling, and providing higher

XX sensitivity and selectivity.

XX Example 1; Page 10; 14pp; English.

XX The PCR primer PV3(5') correspond to an oligomer starting at nucleotide

XX 501 of human papillomavirus type 16. The primer is used to demonstrate a

XX novel in situ PCR method comprising fixed cells, a subset of PCR reagents

XX and opt. a binding protein for single stranded DNA, or fixed cells, a

XX complete set of PCR reagents and the binding protein. The method is used

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